I-90 East Belgrade Interchange

Environmental Assessment

Montana Dept. of Transportation

U.S. Department of Transportation
Federal Highway Administration

October 2008

ENVIRONMENTAL ASSESSMENT

for

I-90 East Belgrade Interchange

in

Gallatin County, Montana

This document is prepared in conformance with the Montana Environmental Policy Act (MEPA) requirements and contains the information required for an Environmental Assessment under the provisions of ARM 18.2.239. It is also prepared in conformance with National Environmental Policy Act (NEPA) requirements for an Environmental Assessment under 23 CFR 771.119, and Section 4(f) of the U.S. Department of Transportation Act under 23 CFR 774.

Submitted pursuant to 42 U.S.C. 4332(2)(c), 49 U.S.C. 303, Sections 75-1-101 & 2-2-104 et seq. M.C.A., and Executive Orders 11990, 11988, and 12898, by the

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration,

Montana Department of Transportation,

and **Gallatin County;**

and

the City of Belgrade and Gallatin Airport Authority as Cooperating Agencies

Larry W. Watson — Date: 10/20/2008
Gallatin County
Grants Administrator

Date: 12/30/08
Montana Department of Transportation
Environmental Services Bureau

Jeffrey A Patten — Date: 1/6/09
U.S. Department of Transportation
Federal Highway Administration

The following persons may be contacted for additional information concerning this document:

Larry W. Watson
Grants Administrator
Gallatin County
311 West Main
Room 304
Bozeman, Montana 59715
(406) 582-3192

Tom S. Martin, P.E.
Environmental Services Bureau Chief
Montana Department of Transportation
2701 Prospect Avenue
PO Box 201001
Helena, Montana 59620-1001
(406) 444-7228

Jeffrey A. Patten
Operations Engineer
Montana Division
Federal Highway Administration
585 Shepard Way
Helena, Montana 59601
(406) 449-5302

Comments on this Environmental Assessment (IM 90-6(111)298; CN 5897) are due by **March 11, 2009** *and should be sent to Tom Martin, MDT, at the address above. This document may also be viewed on the MDT webpage at http:/www.mdt.mt.gov/pubinvolvme/eis.ea.shtml*

Executive Summary

The proposed project is located in southwestern Montana, in Gallatin County, on the eastern end of the City of Belgrade. A new interchange is proposed to be located in the vicinity of Alaska Road and the entrance to Gallatin Field. This is approximately 1.2 miles east of the existing Jackrabbit Lane interchange, and 5.75± miles west of the existing North 19th Avenue interchange in Bozeman. The proposed action includes the following:

- New interchange access to I-90 on the eastern end of Belgrade
- New connection to MT 205 via a grade-separated crossing of the Montana Rail Link (MRL) rail line
- New connection to Alaska Road on the south side of I-90

Purpose and Need of the Proposed Action

The project was developed in response to a number of previous planning studies and Coordinating Committee meetings that identified needed improvements in this general area. The purpose of the project is to:

- Provide greater intermodal connectivity
- Improve regional mobility

Existing Belgrade-area infrastructure essentially directs traffic from the developing areas onto Main Street, Jackrabbit Lane, and the existing Belgrade interchange. The north ramp terminal of the existing interchange is predicted to be at saturation by the year 2010 without any additional improvements in the area. Congestion along MT 205 is also anticipated to worsen in the future, making access to the Airport more difficult.

The proposed interchange project would also provide a direct link between I-90 and the main entrance of Gallatin Field. This route, which is less than one-half mile in length, eliminates any potential delays caused by rail traffic and also eliminates unnecessary traffic through the downtown area, thereby potentially reducing congestion problems on Main Street and Jackrabbit Lane.

Alternatives

The City of Belgrade, Gallatin County, and the Gallatin Airport Authority, in coordination with MDT and FHWA, identified five feasible interchange alternatives. They are:

- Conventional Diamond
- Compressed Diamond
- Partial Cloverleaf
- Compressed Diamond with Roundabouts
- Single-Point Urban Interchange (SPUI)

Common elements to each of the interchange configuration alternatives include:

- Connection from Alaska Road on the south to the proposed interchange
- Re-alignment of Alaska Frontage Road
- Connector roadway beneath the Interstate
- Grade separation of railroad and connector road, with connector roadway beneath
- Depression of MT 205 and Gallatin Field Road
- Connection from the proposed interchange to MT 205

Alternatives Screening Process

The table below provides a summary comparison of the interchange configuration alternatives with regard to operational characteristics, physical size or footprint of the alternative, construction cost, and potential impacts to the surrounding built and natural environment.

Alternative	Operational Characteristics	R-o-W (in acres)	Cost (in millions)	Potential Impacts	Screening Results
A – Conventional Diamond	25	96	$ 29.7	Greatest impact on residential development in NW quadrant	Eliminated due to cost.
B – Compressed Diamond	31	62	$ 24.4	Least impact in all quadrants	Forwarded
C – Partial Cloverleaf	24	80	$ 26.2	Greatest impact on NE quadrant, but minimizes impact on NW quadrant	Eliminated due to impacts.
D – Compressed with Roundabouts	34	65	$ 25.9	Second least impact in all quadrants	Forwarded as design option.

Identification of the Preferred Alternative

The Compressed Diamond interchange configuration is being forwarded as the Preferred Alternative for the proposed new Belgrade interchange. Primary design elements are outlined below.

- New Compressed Diamond Interchange (with potential for roundabout intersection control)
- South connector roadway from Alaska Road to the interchange
- North connector roadway from the interchange, under the railroad, connecting with MT 205, and to Gallatin Field.
- Realignment of Alaska Frontage Road.
- Structures to grade-separate connector roadway from the interstate and the railroad.
- Closure of two current at-grade crossings.

Impact and Mitigation Commitments Summary

The table below outlines the social, economic, and environmental considerations in the project area. The table below provides a summary of the potential impacts to these resources and their proposed mitigation commitments.

Resource	Impacts	Mitigation Commitments
Land Use		
	There may be impacts affecting existing land uses or impacts that would change the location, distribution, density, or growth rate of the area's population. Right-of-way will be required for this project, which will impact adjacent parcels.	Right-of-way requirements have been minimized through the selection of the Preferred Alternative. Any lands needed for right-of-way under the proposed action which are in private ownership would be acquired in accordance with both the *Uniform Relocation Assistance and Real Property Acquisition Act of 1970*, and the *Uniform Relocation Act Amendments of 1987. (Note that inclusion of roundabouts would require additional right-of-way, but no additional relocations).*
Farmlands		
	The project area contains areas with soils classified as Farmland of Statewide Importance	A Farmland Conversion Impact Rating Form has been completed for the proposed project; both the Preferred Alternative and the No Build Alternative result in total points of less than 160, therefore, no further consideration is required.
Social		
	This project will not displace any existing permanent residences or businesses, but would require the acquisition of one to two platted townhomes and a mobile home used periodically by a part-time resident.	No mitigation required.
Economic		
	The proposed project is anticipated to have long-term beneficial effects on the local and regional economies by improving Interstate access. Additional local roadway connectivity will also enhance the potential for future economic activity.	No mitigation required.
Pedestrians and Bicyclists		
	The Preferred Alternative would provide an opportunity for pedestrians and bicyclist to cross the railroad and Interstate at the proposed interchange location through the use of a wide shoulder or dedicated bike/pedestrian lane.	No mitigation required.

Noise		
	According to the noise analysis conducted for this project, noise impacts are anticipated at receptors in the residential area adjacent to the Interstate.	No mitigation is proposed.
Water Quality		
	Impacts are anticipated based on the increase in total surface area of the paved road, and the accompanying increased runoff carrying vehicle-related contaminants.	In addition to the implementation of Best Management Practices during the construction of the proposed project, a Stormwater Pollution Prevention Plan (SWPPP) will be developed to ensure a minimal impact to water quality.
Waterbodies, Wildlife Resources, and Habitat		
	There will be no impact to fisheries, and only minimal, short-term impacts to wildlife resources and habitat.	All construction activity will comply with Montana Noxious Weed Law. Upon completion of the project, disturbed areas would be revegetated to provide a habitat similar to what already exists.
Cultural/Archaeological/Historic Resources		
	There are two historic sites within the vicinity of the project: an irrigation ditch and a railroad line. Minimal impacts are anticipated on these resources.	No mitigation is proposed.
Visual		
	Due to the nature of the improvements in an urban, built-up setting, the visual impacts will be minimal and may ultimately provide opportunity for aesthetic improvements.	No mitigation required.
Construction Impacts		
	Temporary inconveniences such as longer travel times, detours, temporary closures, and noise and dust associated with the use of heavy machinery can be anticipated. Additionally, temporary impacts to water quality are possible.	All advanced warning and detour signing would be in accordance with the MUTCD; a SWPPP would also be developed to ensure any impacts to water quality are minimal.

The following resources were determined to have no impact under the Preferred Alternative.

- Parks and Recreation/ NL&WCF - Section 6(f) Lands
- Environmental Justice
- Air Quality
- Wetlands
- Floodplains
- Hazardous Waste
- Threatened and Endangered Species

Major Unresolved Issues

The total funding package is unknown at this time. This proposed project has received an earmark and Interstate maintenance funds, however, these funds are not sufficient to complete the entire project (design, right-of-way, utilities, construction, etc.). Additional funding must be secured prior to project construction. The funding roles and responsibilities will be addressed in a supplemental agreement to be signed by all parties and considered in conjunction with the Memorandum of Understanding between Gallatin County and MDT for the interchange listed in Appendix A.

This project is anticipated to include two phases for design and phases for right-of-way, utilities, and construction. The first phase of design is the Environmental Assessment and decision document. This phase is the responsibility of Gallatin County. The next phase would be final design, if the decision is to move forward with the proposed project. The final design phase is included in the 2008-2012 Montana Department of Transportation Statewide Transportation Improvement Program. Additional funding will be necessary to forward into the construction phase.

Page Intentionally Left Blank

TABLE OF CONTENTS

FOREWORD I

1.0 PURPOSE AND NEED 1-1
- 1.1 Project Area Description 1-1
- 1.2 Proposed Action 1-2
- 1.3 Purpose of the Proposed Action 1-3
- 1.4 Need for the Proposed Action 1-3

2.0 ALTERNATIVES 2-1
- 2.1 Development of Alternatives 2-1
- 2.2 Preliminary Screening Process 2-12
- 2.3 Alternatives Eliminated from Further Evaluation 2-14
- 2.4 Identification of the Preferred Alternative 2-15

3.0 RESOURCES, IMPACTS, AND MITIGATION 3-1
- 3.1 Land Use/Right-of-Way/Easements 3-1
- 3.2 Farmlands 3-5
- 3.3 Social Conditions 3-6
- 3.4 Economic Conditions 3-11
- 3.5 Pedestrian and Bicycle Facilities 3-14
- 3.6 Noise 3-14
- 3.7 Water Quality 3-17
- 3.8 Wetlands 3-17
- 3.9 Waterbodies, Wildlife Resources, and Habitat 3-17
- 3.10 Cultural/Archaeological/Historic Resources 3-19
- 3.11 Visual 3-20
- 3.12 Construction Impacts 3-21
- 3.13 Cumulative Effects 3-24
- 3.14 Permits and Regulatory Requirements 3-28

4.0 LIST OF PREPARERS AND REVIEWERS 4-1

5.0 DISTRIBUTION LIST 5-1

6.0 COMMENTS AND COORDINATION 6-1
- 6.1 Public Agencies 6-1
- 6.2 Public Involvement 6-1

APPENDICES
- A. De Minimis Section 4(f) Evaluation
- B. SHPO Coordination
- C. Memorandum of Understanding

List of Figures

1.0 Purpose and Need

1-1 General Project Location 1-1
1-2 Project Location and Limits 1-2
1-3 Intermodal Connectivity Comparison 1-4
1-4 Mailine and Interchange Operations 1-5
1-5 Location of Proposed Connector Roadways 1-6

2.0 Alternatives

2-1 Conventional Diamond Interchange 2-2
2-2 Schematic Diagrams of a Conventional Diamond Interchange 2-3
2-3 Compressed Diamond Interchange 2-4
2-4 Schematic Diagrams of a Compressed Diamond Interchange 2-5
2-5 Partial Cloverleaf Interchange 2-6
2-6 Schematic Diagrams of a Partial Cloverleaf Interchange 2-7
2-7 Compressed Diamond Interchange with Roundabouts 2-8
2-8 Typical Interchange Roundabout Features 2-9
2-9 Common Elements 2-10

3.0 Resources, Impacts, and Mitigation

3-1 Begrade Zoning Map 3-2
3-2 Right-of-Way Impacts and Relocations 3-4
3-3 Important Farmlands 3-5
3-4 Demographic Composition of Gallatin County and the cities of Belgrade and Bozeman. 3-7
3-5 Belgrade Household Income, 1990 and 2000 3-8
3-6 Model Output Comparison 3-10
3-7 Total Housing Units, 1990-2000 3-12
3-8 Number of City of Belgrade-Issued Building Permits by Year 3-13
3-9 Noise Monitoring and Impact Locations 3-16
3-10 Historic Resouces in Project Area 3-20
3-11 Existing Utility Lines 3-22

List of Photos

2.0 Alternatives

2.1 Actual Roundabout Application 2-9

List of Tables

1.0 Purpose and Need

1.1 Levels of Service 1-5

2.0 Alternatives

2.1 Interchange Configuration Operational Analysis Summary 2-12
2.2 Interchange Configuration Screening Summary 2-13

3.0 RESOURCES, IMPACTS, AND MITIGATION
3.1 FHWA and MDT Noise Abatement Criteria 3-15
3.2 Receptors and Predicted Noise Levels for the No-Build and Preferred Alternatives. 3-16

List of technical reports:

Belgrade Area Transportation Plan, 2002
Belgrade Interchange: A Cultural Resource Inventory of Two Rural Properties along Alaska Road Southeast of Belgrade, Montana, Ethnoscience, 2006
Biological Resources Report, GANDA, 2006
Connecting Communities: Gallatin County Trails Report & Plan, 2001
East Belgrade Interchange Project Traffic Noise Study, Big Sky Acoustics, 2006
Greater Bozeman Area Transportation Plan 2001 Update
Operational Analysis, Morrison-Maierle, Inc., 2005
Phase I Cultural Resources Inventory, 2005
Soil Survey of Gallatin County Area, Montana, 1996
Noise Analysis, Big Sky Acoustics, 2006
Roundabouts: An Informational Guide, U.S. Department of Transportation, Federal Highway Administration, Publication No. FHWA-RD-00-067.

Copies of the above technical reports can be obtained from:

Larry W. Watson
Gallatin County
311 W. Main, Room 304
Bozeman, MT 59715
(406) 582-3192
(406) 582-3003 (FAX)
lwatson@gallatin.mt.gov

Abbreviations and Acronyms

± ..... approximately
ac ..... acre(s)
ACHP ..... Advisory Council on Historic Preservation
BRR ..... Biological Resource Report
CADD ..... Computer Aided Design and Drafting
COE ..... U.S. Army Corps of Engineers
DEQ ..... Department of Environmental Quality
DNRC ..... Department of Natural Resources and Conservation
EA ..... Environmental Assessment
ESA ..... Endangered Species Act
ft ..... foot (feet)

Hwy ..... Highway(s)
in ..... inch(es)
LOS ..... Level of Service
mi ..... mile(s)
MDT ..... Montana Department of Transportation
MFWP ..... Montana Fish, Wildlife, and Parks
MNHP ..... Montana Natural Heritage Program
MPDES ..... Montana Pollution Discharge Elimination System
NRCS ..... Natural Resources Conservation Service
NRHP ..... National Register of Historic Places
SHPO ..... State Historic Preservation Office
T/E ..... Threatened and Endangered
USFS ..... United States Forest Service
USFWS ..... United States Fish and Wildlife Service

FOREWORD

This Environmental Assessment (EA) has been prepared by Gallatin County, the Gallatin Airport Authority, and the City of Belgrade for the consideration of a new interchange to be constructed by the Montana Department of Transportation (MDT) and the Federal Highway Administration (FHWA).

Pursuant to federal regulations, this document provides environmental analysis for the federal-aid action to be conducted by MDT and FHWA. The cooperative agreement between MDT and Gallatin County is contained in a Memorandum of Understanding (contained in Appendix C), and outlines the responsibility of each agency in the study, design, funding, construction, and mitigation for this proposed project.

Project History

Transportation Planning

The proposed project was developed in response to a number of previous planning studies that prioritized improvements in this general area. The primary interest was to add an interchange facility to provide greater intermodal connectivity and accommodate projected travel demand.

The *Belgrade Area Transportation Plan* of 2002 identified an Airport Interchange as one of several proposed major improvements. According to the *Plan*, "[l]imited access to Interstate 90 [I-90] from the Belgrade Area contributes to congestion at several intersections within the Belgrade Area Study Boundary, and relatively high volumes of traffic on Main Street." The *Plan* recommended the construction of an I-90 interchange in the area generally between Alaska Road and Love Lane in order to provide better intermodal access to Gallatin Field from I-90.

The *Greater Bozeman Area Transportation Plan 2001 Update* also included an Airport Interchange in its list of proposed major improvements, noting that there is a need for a direct access route to the Airport.

Transportation Commission Policy 13

It is the policy of the Montana Transportation Commission (MTC) that additional interchanges on Montana's Interstate be considered for addition on the following basis.

To be considered, an interchange proposed by an entity other than the Montana Department of Transportation (MDT) must:

- Be physically feasible. It must meet applicable engineering and traffic standards and not be unreasonably expensive.
- Be compatible with local planning. It must be compatible with the local transportation improvement program and long-range transportation and land use plans as applicable.

- Have a sponsor willing to carry the financial and administrative burden. That sponsor must be a city or county government that would have to carry the ball as far as preparing feasibility and environmental studies, arranging the financing package, preparing the design, securing the right-of-way, and securing the access through the MDT and Federal Highway Administration (FHWA) reviews and approvals.
- Have a funding plan compatible with the interchange's intended use.

The MDT and MTC set funding priorities unless:

- There is a positive showing that all needs on the existing NHS and STP program are being met, or
- There is a positive showing that the economic development benefits which will result from construction of a new interchange outweigh the necessity to meet existing needs in the above.

If a proposed interchange meets the above criteria, MDT and MTC will consider the following factors in their further analysis of the proposal:

- Traffic use, both present and future
- Cost (engineering, right-of-way, construction, and maintenance)
- Local and/or private funding support
- Problems solved for MDT (operational, capacity, etc.)
- Problems created for MDT (operational, capacity, etc.)
- Problems solved for local governments (operational, capacity, etc.)
- Problems created for local governments (land use, zoning, maintenance, etc.)
- Social, economic, and environmental impacts
- Benefit-cost analysis
- Economic development

Additional interchanges must stand on their own merits and compete with other types of projects for inclusion in the program.

Under this policy, Gallatin County, the City of Belgrade, and the Gallatin Airport Authority have assumed responsibility for developing this proposed project for review by MDT and FHWA.

Interchange Approval Process

The City of Belgrade, Gallatin County, and the Gallatin Airport Authority initiated the Request for Access process in accordance with the policies of the FHWA to explore the feasibility of constructing a new interchange on I-90 in proximity to Gallatin Field. The first step in this process is the demonstration of operational and engineering acceptability of the proposed interchange. If acceptable, an environmental review in accordance with the National Environmental Policy Act (NEPA) and Montana Environmental Policy Act (MEPA) would be conducted prior to seeking FHWA approval of the new point of access to the Interstate.

The Bozeman Area Transportation Coordinating Committee established a Belgrade Interchange Sub-Committee in December 2002 to determine the feasibility of an interchange in Belgrade to improve the connectivity between the Interstate and the airport.

The *Operational Analysis* was undertaken by the Coordinating Committee and submitted to MDT and FHWA in February 2005. The *Operational Analysis* received initial approval from FHWA in December 2005. This marks the completion of the first step in FHWA's Interchange Approval Process. This Environmental Assessment (EA) document represents the NEPA/MEPA review step in the Approval Process.

Page Intentionally Left Blank

1.0 PURPOSE AND NEED

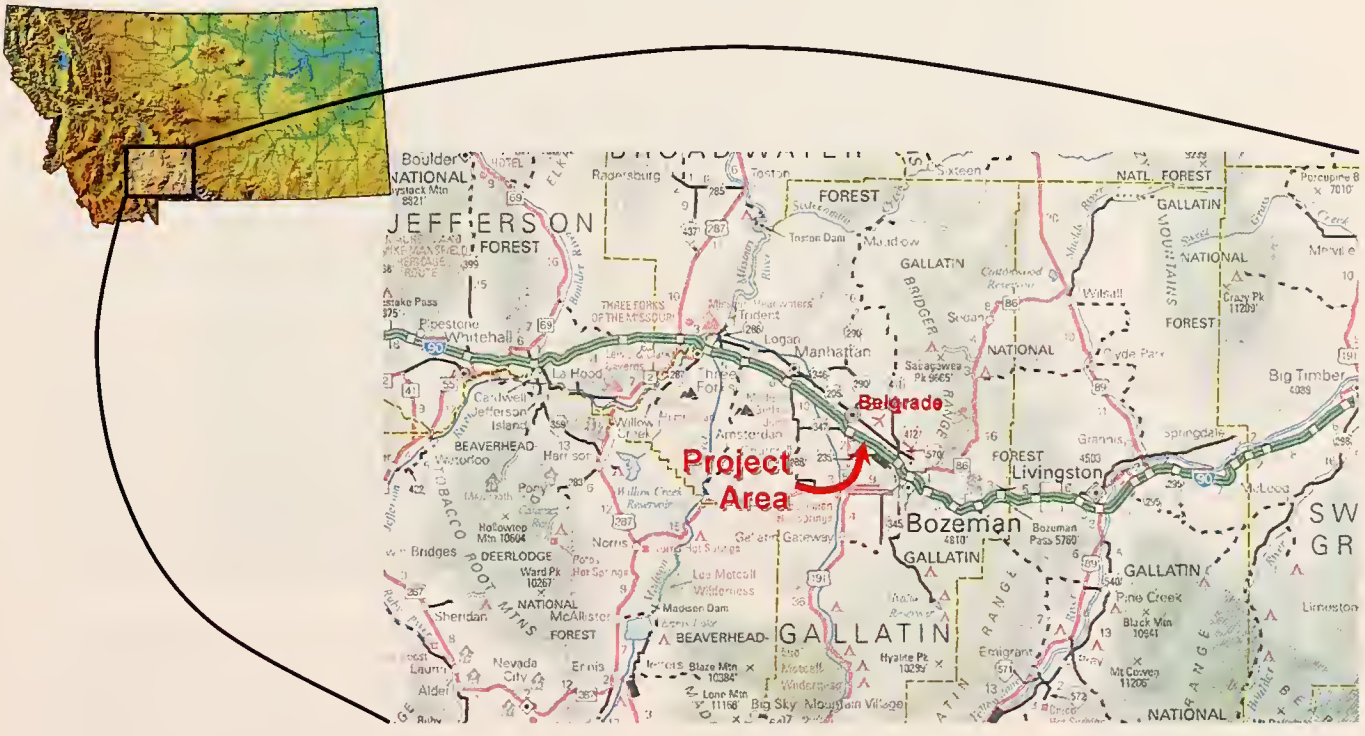
This chapter provides a summary description of the project area and the proposed actions. This chapter also provides a definition of the specific purpose of the proposed project and the need for the proposed improvements.

1.1 Project Area Description

As illustrated in Figure 1-1, the proposed project is located in southwestern Montana, in Gallatin County, on the eastern end of the City of Belgrade. The project lies within the following legal description(s):

Township	Range	Section(s)
1S	4E	1, 12, 13, 24
1S	5E	6, 7, 8, 17, 18, 19

Figure 1-1
General Project Location



As illustrated in Figure 1-2 following, a new interchange is proposed to be located in the vicinity of Alaska Road and the entrance to Gallatin Field. This is approximately 1.2 miles east of the existing Jackrabbit Lane interchange, and 5.75± miles west of the existing North 19th Avenue interchange in Bozeman.

1.2 Proposed Action

An interchange in the vicinity of the Airport entrance would require short connector roadways to be constructed from the interchange to the Frontage Road (Montana [MT] 205) to the north, and to Alaska Road to the south.

The proposed action includes the following:

- New interchange access to I-90 on the eastern end of Belgrade
- New connection to MT 205 via a grade-separated crossing of the Montana Rail Link (MRL) rail line
- New connection to Alaska Road on the south side of I-90

Figure 1-2 illustrates the general location of the proposed interchange. More detail on the specific elements of the proposed action is contained in Chapter 2 of this document.

Figure 1-2
Project Location and Limits

1.3 Purpose of the Proposed Action

The project was developed in response to a number of previous planning studies and Coordinating Committee meetings that identified needed improvements in this general area. The primary interest was to provide better regional mobility and access to Gallatin Field in response to existing and projected travel demands. The purpose of the project is to:

- Provide greater intermodal connectivity
- Improve regional mobility

1.4 Need for the Proposed Action

Existing Belgrade-area infrastructure essentially directs traffic from the developing areas onto Main Street, Jackrabbit Lane, and the existing Belgrade interchange. The north ramp terminal of the existing interchange is predicted to be at saturation by the year 2010 without any additional improvements in the area. The westbound off-ramp at Jackrabbit is already experiencing problems with existing traffic backed up near the through lanes of the Interstate. Congestion along MT 205 is also anticipated to worsen in the future, making access to the Airport more difficult.

Modal Interrelationships

FHWA has emphasized the importance of intermodal connectivity in their guidance on exploring transportation improvements. "Modal interrelationships" refers to how a proposed facility will interface with and serve to complement other modal facilities such as airports, rail and port facilities, and mass transit services. Gallatin Field serves an important regional function for passenger and freight air service. The proposed interchange would provide a much more direct intermodal link between the Interstate system and Gallatin Field.

Gallatin Field is the second busiest airport in Montana based on passenger boardings and tower operations. More than 335,000 passengers boarded airline flights at Gallatin Field in 2005, marking an 8.6 percent increase over the previous year and over 10 consecutive years of growth. Nearly 60 percent of the passengers enplaned/deplaned at the Airport originated from United States cities east of the Mississippi River. This service link between the nation and geographic areas surrounding the Belgrade area - including Yellowstone National Park, Big Sky, and Bridger Bowl - highlight the role of the proposed interchange as a regional facility.

As illustrated in Figure 1-3, the existing Belgrade interchange provides an indirect route to Gallatin Field. The route to the Airport from the existing I-90 interchange is over two miles in length, and requires out-of-direction travel north on Jackrabbit Lane, crossing two sets of railroad tracks, and continuing southeast on Main Street through downtown Belgrade before reaching the Airport entrance. The proposed interchange project would provide a direct link between I-90 and the main entrance of Gallatin Field. This route, which is less than one-half mile in length, eliminates potential delays caused by rail traffic and also eliminates unnecessary traffic through the downtown area, thereby potentially reducing congestion problems on Main Street and Jackrabbit Lane.

Figure 1-3
Intermodal Connectivity Comparison

Traffic Operation

The intent of the proposed project is to provide regional access to the Airport, and to do so without degrading the traffic operations of the Interstate and the local roadway network. As discussed below, the proposed interchange would not necessarily improve traffic operations on the surrounding network, but based on the previous interchange justification studies and more recent modeling, the interchange would improve mobility and intermodal connectivity without negative impacts on surrounding facilities.

Aggressive growth and development in the surrounding area, as well as increasing levels of airline travelers, have put a strain on the existing roadway network in the study area. The existing network is physically constrained by the parallel system of railroad, frontage road, and Interstate in this corridor; thus limiting the ability to expand the existing network to accommodate future demand.

Traffic conditions on transportation facilities are commonly defined using the Level of Service (LOS) concept. The *Highway Capacity Manual* (HCM) defines LOS based on average travel speed, percent time delay, intersection delay, and capacity utilization to provide a qualitative

assessment of the driver's experience. Six LOS categories ranging from A to F are used to describe traffic operations. LOS A represents the best conditions, and LOS F represents the worst. A more complete description of the LOS categories is provided in Table 1.1.

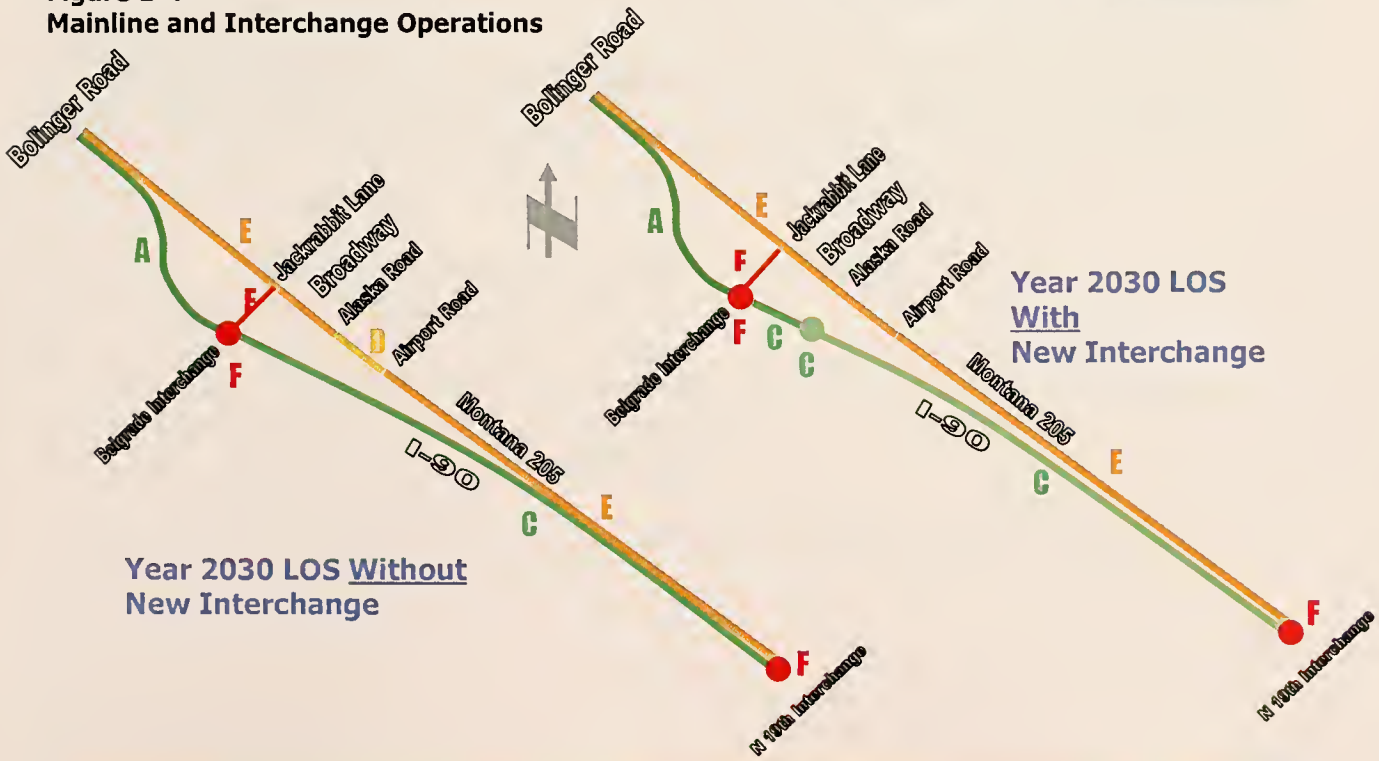
According to the *Operational Analysis* completed in January 2005, several points on the area's roadway network are predicted to operate over capacity and experience congestion without the addition of the proposed interchange. Subsequent analysis, based on the modeling efforts conducted as part of the Bozeman Area Transportation Plan Update in 2008, suggest that higher traffic volumes would be experienced across the entire roadway network based on aggressive growth rates in recent years. As illustrated in Figure 1-4, the existing Belgrade interchange, and the crossroad (Jackrabbit Lane) are currently nearing saturation and are anticipated to operate at LOS "F" by the year 2030 without the proposed project. Additionally, the portion of MT 205 from the Gallatin Field main entrance to North 19th is predicted to operate at LOS "E." With the proposed project, traffic volumes would increase slightly in the immediate vicinity of the new interchange, however, the network LOS is still anticipated to be within acceptable limits.

Table 1.1
Levels of Service
(for two-lane highways)

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		55+	Highest quality of service. Free traffic flow with few restrictions on maneuverability or speed. **No delays**
B		50	Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability. **No delays**
C		45	Stable traffic flow, but less freedom to select speed, change lanes or pass. **Minimal delays**
D		40	Traffic flow becoming unstable. Speeds subject to sudden change. Passing is difficult. **Minimal delays**
E		35	Unstable traffic flow. Speeds change quickly and maneuverability is low. **Significant delays**
F			Heavily congested traffic. Demand exceeds capacity and speeds vary greatly. **Considerable delays**

Source: 2000 HCM, Exhibit 20-2, LOS Criteria for Two-Lane Highways in Class 1

Figure 1-4
Mainline and Interchange Operations



Safety

While not a primary goal of the project, the proposed interchange and new rail crossing would improve overall emergency response time for police, fire, and rescue personnel to the entire Belgrade area. The provision of a grade separation at the railroad would assure access to both sides of the tracks in a more timely fashion by decreasing the potential for conflict with trains.

System Linkage

As a part of this project, a new north-south connection across I-90 and the MRL rail lines would be provided on Alaska Road (through the new interchange). The general location of the proposed connector roadways is shown in Figure 1-5.

Figure 1-5
Location of Proposed Connector Roadways

Social Demands and Economic Development

The City of Belgrade has experienced rapid growth in the past fifteen years. The *Belgrade Area Plan* of 1999 indicates that "[i]n 1990, 3,411 people lived within Belgrade's city limits. [By 1999], Belgrade [was] home to almost 6,000 people, and the City and planning jurisdiction combined are home to approximately 12,000 people." The City of Belgrade is currently planning for 10,500 people and has an estimated population in 2006 of 7,200 people. According to the 2003 *Gallatin County Growth Policy*, Gallatin County is now the second fastest growing Montana county. This growth has increased travel demands between Belgrade, Bozeman, and other surrounding areas.

Providing an alternate access to the Interstate system ahead of, or concurrent with, the expected growth south of the proposed interchange will enhance orderly development and overall connectivity and mobility in keeping with the goals and policies of the local government entities.

2.0 ALTERNATIVES

This chapter describes the process of developing project alternatives and determining which ones have the potential to satisfy the purpose and need for the proposed project. A detailed description of the alternatives evaluated in this document is also provided.

2.1 Development of Alternatives

Early planning efforts identified the need for better Interstate access to Belgrade and the Airport. General recommendations were presented on the location for a new interchange, but no formal decisions were made during those processes. Since the completion of the transportation planning efforts in 2001 and 2002, local decision-makers, in cooperation with MDT and FHWA, determined that the interchange would best serve the Airport and the downtown area by being located in the immediate vicinity of Alaska Road. Other locations were considered but eliminated for various reasons. Those alternate locations are discussed in Section 2.4 of this document.

The City of Belgrade, Gallatin County, and the Gallatin Airport Authority entered into a services agreement with Morrison-Maierle, Inc. (MMI), to continue planning efforts in the Belgrade area following completion of the *Belgrade Area Transportation Plan* in 2002. In particular, MMI was contracted to complete an operational analysis of the feasibility of constructing a new interchange on I-90 in the proximity of Gallatin Field. The *Operational Analysis* (January 2005) identified five feasible interchange alternatives. They are:

- Conventional Diamond
- Compressed Diamond
- Partial Cloverleaf
- Compressed Diamond with Roundabouts
- Single-Point Urban Interchange (SPUI)

Common elements to each of the interchange configuration alternatives include:

- Connection from Alaska Road on the south to the proposed interchange
- Re-alignment of Alaska Frontage Road
- Connector roadway beneath the Interstate
- Grade separation of railroad and connector road, with connector roadway beneath
- Depression of MT 205 and Gallatin Field Road
- Connection from the proposed interchange to MT 205

These elements are discussed following the interchange configuration descriptions below.

As illustrated in Figure 2-1, the Conventional Diamond interchange configuration consists of traditional diagonal ramps for movement to and from the Interstate and the crossroad. The intersections of the crossroad and the ramps would be signal controlled. Ramp terminal spacing on the crossroad is determined by the configuration of the left-turn bays (traffic from the crossroad entering the freeway) and the volume of traffic anticipated for the most dominant movement. In this case, the southbound to eastbound movement is the dominant movement, and if conventional design is followed, the end-to-end left-turn bays would require approximately 800 feet of separation between ramp terminals.

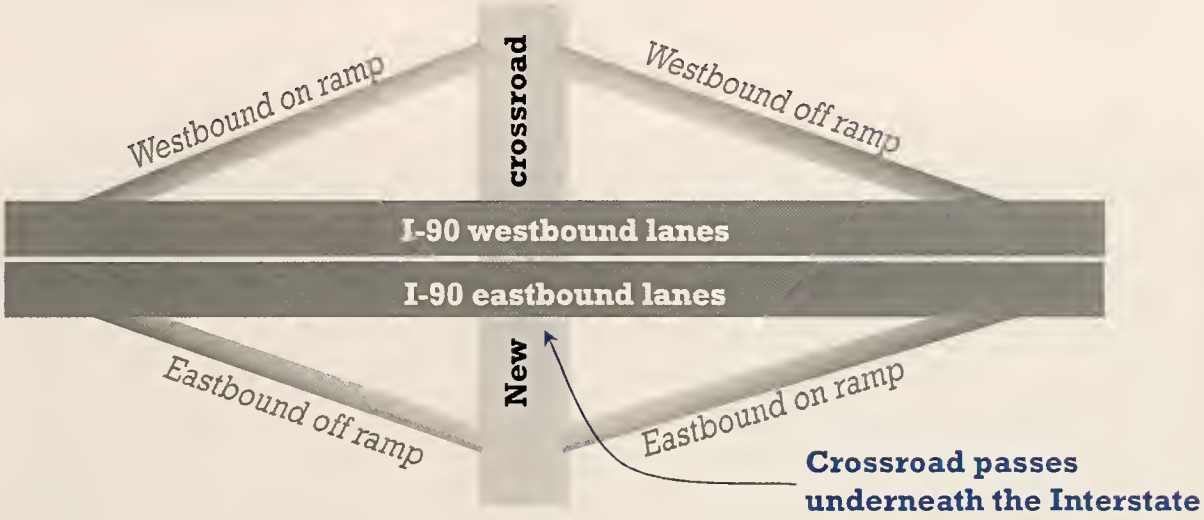
Figure 2-1
Conventional Diamond Interchange

Advantages:
This configuration is quite common and familiar to most motorists. It serves drivers' expectation of making a left-turn to get to a destination to their left.

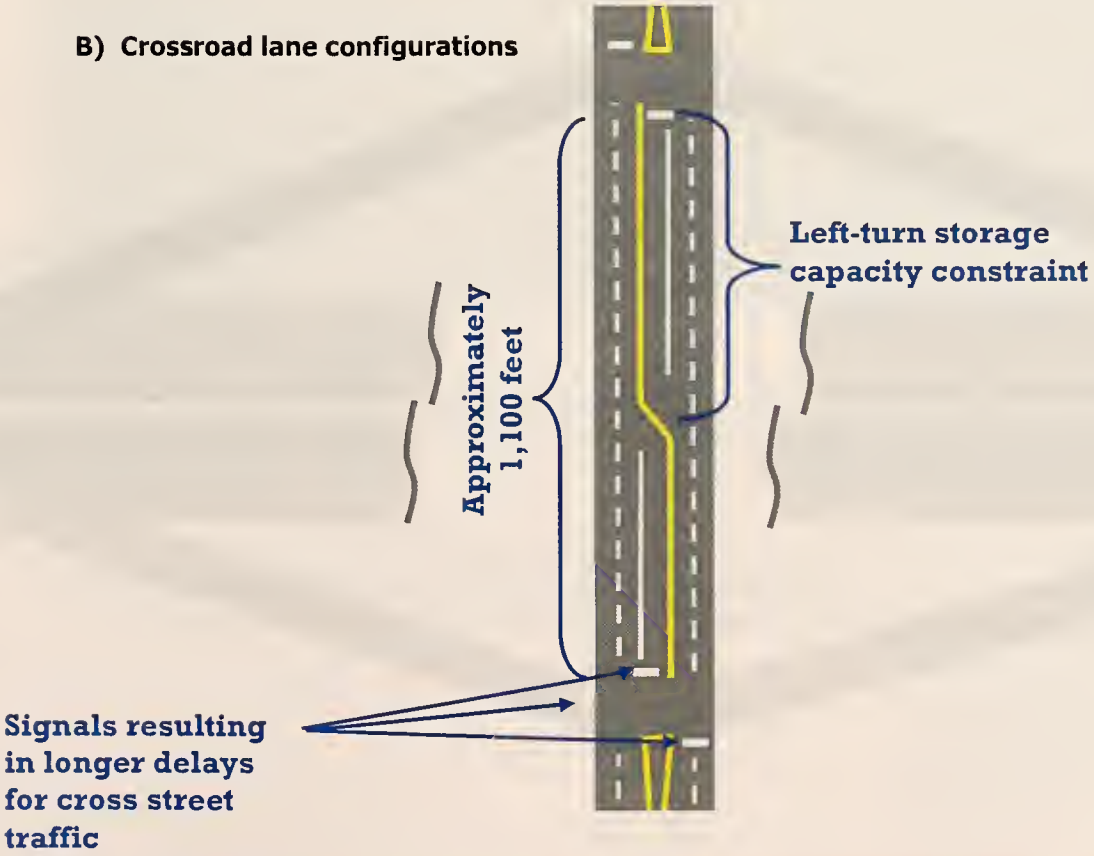
Disadvantages:
This configuration limits the capacity to accommodate large volumes of traffic moving between the freeway and the crossroad. As traffic volumes grow, the ramp terminals must be controlled by three-phase traffic signals. The required protected left-turn phase has two negative impacts on the interchange operation: 1) it negatively influences capacity of the crossroad with an additional signal phase taking time away from crossroad flow; 2) the protected left-turn signal phase places traffic onto the on-ramp in long platoons (lines of vehicles), which are not efficiently received in heavy freeway traffic.

Figure 2-2
Schematic Diagrams of a Conventional Diamond Interchange

A) General Configuration



B) Crossroad lane configurations



As illustrated in Figure 2-3, the Compressed Diamond interchange configuration consists of traditional diagonal ramps for movement to and from the Interstate and the crossroad. The intersections of the crossroad and the ramps would be signal controlled. Ramp terminals are compressed together much closer than in the Conventional Diamond. Their separation is dictated by the width of the freeway. This is accomplished by stopping all traffic on the crossroad outside of either ramp terminal, thus keeping the space between ramp terminals free of stopped traffic.

Figure 2-3
Compressed Diamond Interchange

Advantages:
This configuration is quite common and familiar to most motorists. It serves drivers' expectation of making a left-turn to get to a destination to their left. This configuration minimizes the right-of-way required to accommodate a freeway interchange.

Disadvantages:
This configuration would require additional length of Interstate bridge span to accommodate future roadway expansion to four through-lanes on the crossroad.

Figure 2-4
Schematic Diagrams of a Compressed Diamond Interchange

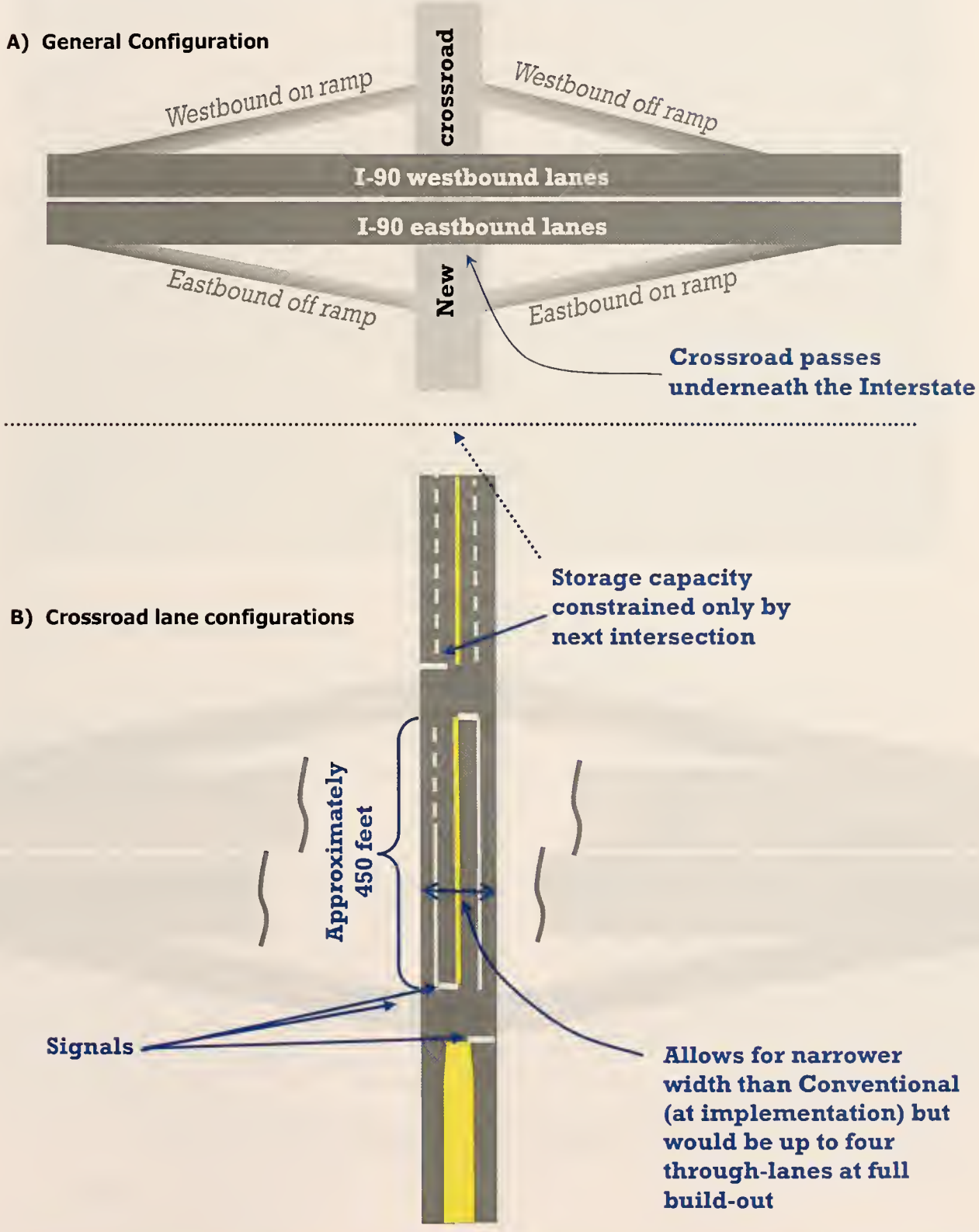


Figure 2-5
Partial Cloverleaf Interchange

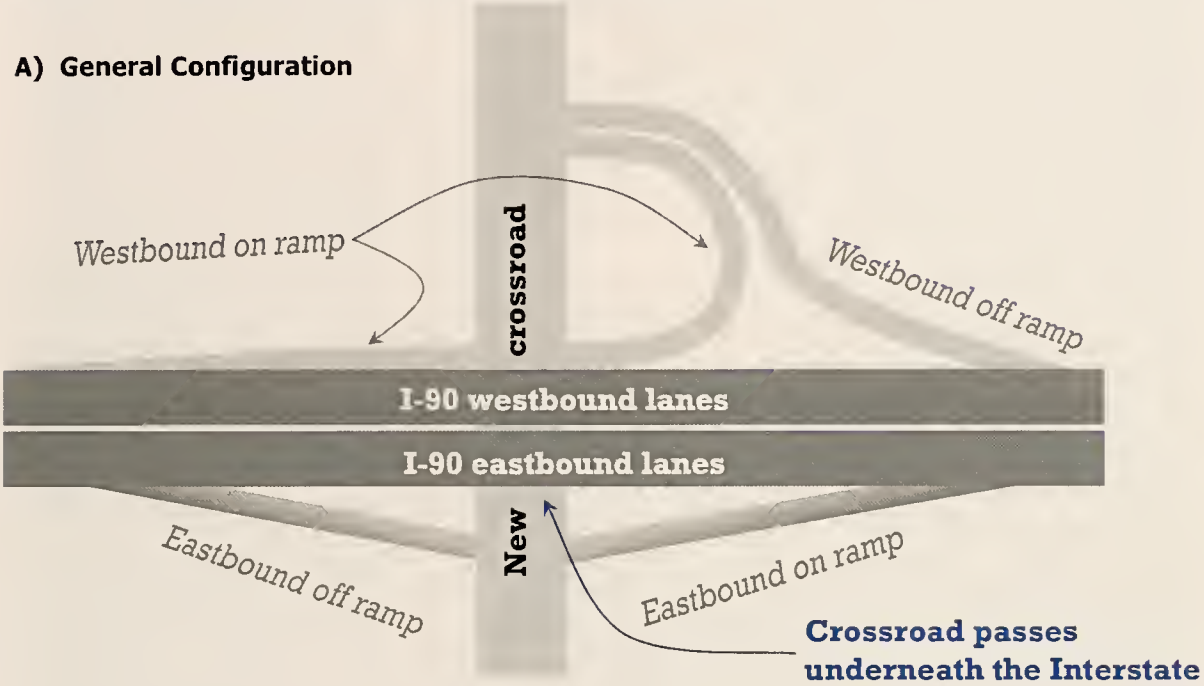
The Partial Cloverleaf interchange configuration consists of traditional diagonal ramps for movement to and from the eastbound Interstate lanes and the crossroad. For westbound Interstate travel, the Interstate traffic would utilize a wide sweeping ramp to access the crossroad. This ramp is located out beyond a cloverleaf ramp that accommodates crossroad traffic accessing the westbound Interstate lanes. This configuration is intended to completely avoid impacts to the newly developing residential area in the northwest quadrant of the proposed interchange. The intersections of the crossroad and the ramps would be signal controlled.

Advantages:
By eliminating a left-turn bay under the Interstate, the structure length can be minimized. Eliminating one of the conflict points also allows for the use of a simple two-phase traffic control.

Disadvantages:
The long cloverleaf ramp will require a substantial amount of fill to bring the ramp from an elevation below the Interstate up to the westbound lanes. The wide sweeping ramp also requires a substantial lengthening of the westbound off-ramp out beyond the loop. These ramps require a substantial amount of right-of-way in the northeast quadrant of the proposed interchange. The loop ramp would also require a long merge length on the Interstate, requiring the Interstate structure to be much wider than the diamond-type interchanges to accommodate the additional lane.

Figure 2-6
Schematic Diagrams of a Partial Cloverleaf Interchange

A) General Configuration



B) Crossroad lane configurations

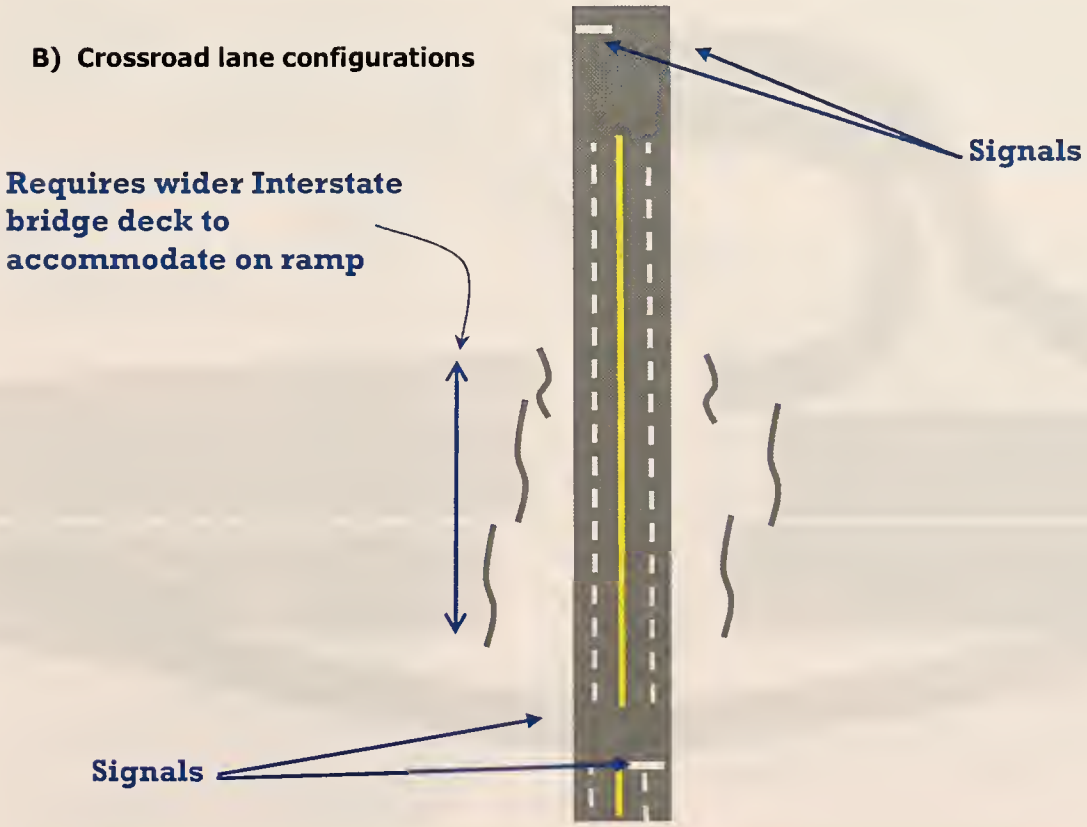


Figure 2-7
Compressed Diamond Interchange with Roundabouts

A second Compressed Diamond interchange configuration was considered that would include a roundabout intersection design at each of the key intersections of the interchange and adjacent roadway junctions. It consists of the same diagonal ramps for movement to/from the Interstate and the crossroad. The intersections of the crossroad and the ramps (as well as the MT 205 intersection) would be controlled with a roundabout design instead of traffic signals.

Advantages:
The overall footprint of the configuration would be substantially less than that of the Conventional Diamond and the Partial Cloverleaf. The structure spans required would be the same as the Partial Cloverleaf.

Disadvantages:
The roundabout concept is relatively new to Montana, but this form of intersection control is increasingly common in western states and has been used throughout the world for many years. Roundabouts have been met with resistance by local officials and some members of the public due to lack of experience with this type of intersection geometry. Figure 2-8 and Photo 2-1 illustrate typical roundabout applications and operational features to provide a better understanding of this engineering concept.

To provide further background and information, the following has been excerpted from the FHWA roundabout guide: *Roundabouts: An Informational Guide* (See List of Technical Reports in the Table of Contents of this document).

Roundabouts have been demonstrated to be generally safer for motor vehicles and pedestrians than other forms of at-grade intersections (p. 23). If achieved by good design, then in principle, lower vehicle speeds should provide the following safety benefits:

- Reduce crash severity for pedestrians and bicyclists, including older pedestrians, children, and impaired persons;
- Provide more time for entering drivers to judge, adjust speed for, and enter a gap in circulating traffic;
- Allow safer merges into circulating traffic;
- Provide more time for all users to detect and correct for their mistakes or mistakes of others;
- Make the intersection safer for novice users. (p. 24)
- Reduce in severity or eliminate many severe conflicts that are present in traditional intersections. (p. 25)

Compared to signalized intersections, a roundabout does not have signal equipment that requires constant power, periodic light bulb and detection maintenance, and regular signal timing updates. Roundabouts, however, can have higher landscape maintenance costs, depending on the degree of landscaping provided on the central island, splitter islands, and perimeter. Illumination costs for roundabouts and signalized intersections are similar. Drivers sometimes face a confusing situation when they approach a signalized intersection during a power failure, but such failures have minimal temporary effect on roundabouts other than the possible loss of illumination.

Figure 2-8
Typical Interchange Roundabout Features

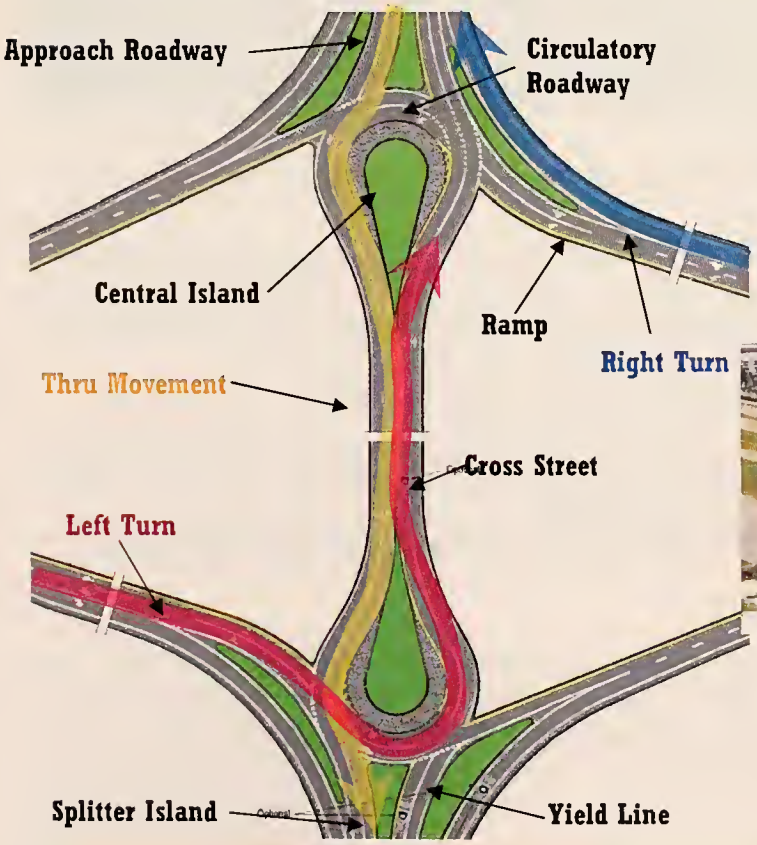
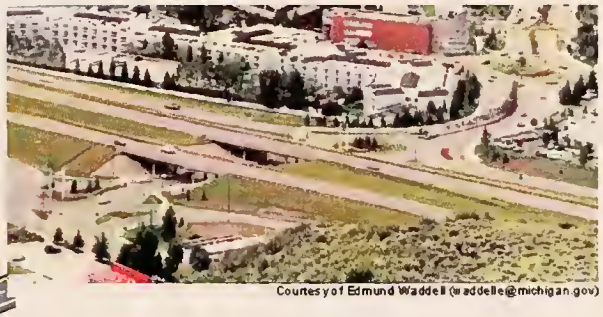


Photo 2-1
Actual Roundabout Application



Courtesy of Edmund Waddell (waddelle@michigan.gov)

Figure 2-9
Common Elements

Several elements are common to each interchange concept. These elements include:

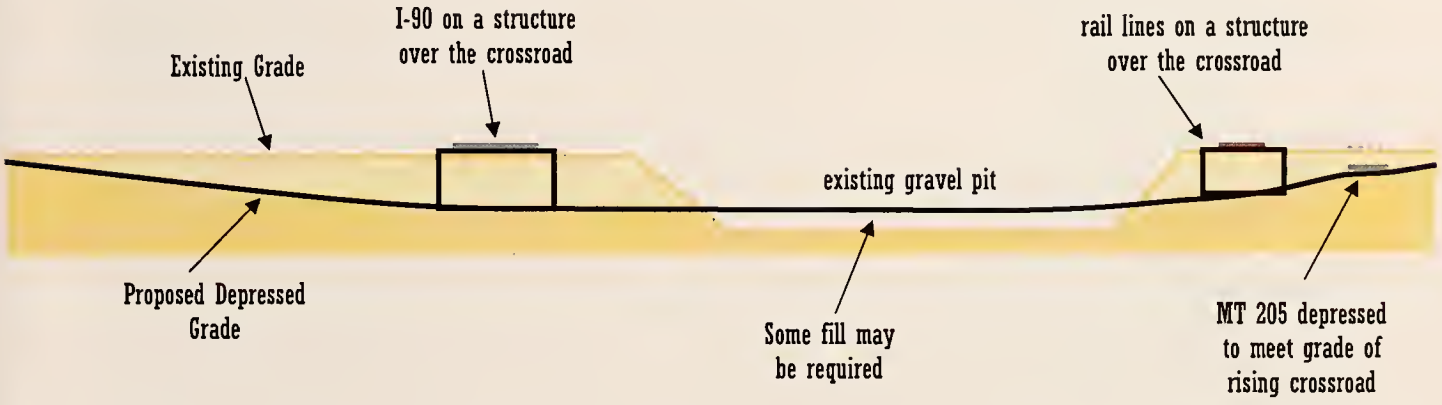
1) Connector roadway from Alaska Road north to the new interchange, with Alaska Road passing under the Interstate
2) Realignment of Alaska Frontage Road to connect to an extension of Frank Road
3) Connector roadway from the interchange north to MT 205
4) A structure under the MRL rail lines to allow grade-separated access from Alaska Road to MT 205
5) Depression of MT 205 and Gallatin Field Road to accommodate the connection of Alaska Road coming up from below the railroad
6) Closure of the existing North Alaska Road at-grade crossing and the JTL gravel pit at-grade crossing of the railroad

Details on these elements follow:

1) The connector roadway from Alaska Road north to the new interchange would diverge east from Alaska Road to connect with the underpass under I-90. The highway underpass would be constructed to accommodate five lanes on Alaska Road, but this segment of Alaska may only be constructed to three lanes in the initial phase.

2) The Alaska Frontage Road alignment would need to be relocated to accommodate the proposed eastbound off-ramp. The specific location of the new Alaska Frontage Road alignment would be dictated by the interchange configuration as well as the alignment of the proposed Frank Road extension. The County will work with the property owner and MDT to identify the most suitable alignment in this area. Options for the Frank Road alignment are discussed in Section 2.2, following.

3) The connector roadway from the proposed interchange to MT 205 would remain at generally the same elevation from under I-90, through the gravel pit, and under the railroad. This new connector roadway would tie into MT 205 and a new intersection with Gallatin Field Road. The intersection would be either signal-controlled or controlled with a roundabout configuration.



4) The new connection of the interchange to MT 205 would require an underpass under the railroad. This structure would be long enough to accommodate the current two rail lines, and wide enough to accommodate up to five travel lanes on the connector roadway.

5) MT 205 and Gallatin Field Road will have to be depressed up to ten feet below the existing grade to provide a new junction of the interchange connector roadway. No accesses would be affected, but approximately 1,200 feet of MT 205 and 2,100 feet of Gallatin Field Road would be reconstructed by this action. As illustrated in Figure 2.9, Gallatin Field Road would be reconstructed along a different alignment to connect into a new terminal access and circulation roadway.

6) Two existing at-grade rail crossings would be closed, and traffic would utilize the new rail undercrossing proposed as part of this project. Residences in the Las Campanas area would access Alaska Road and MT 205 via a proposed extension of Northern Pacific Avenue to the east. The gravel pit operation would access Alaska Road and MT 205 via a new access at the west end of the pit.

2.2 Preliminary Screening Process

Analysis of Interchange Configurations

Each of the interchange alternatives was compared and screened based on their operational characteristics, right-of-way requirements, relative cost, and potential impacts to the adjacent built and natural environment.

Table 2.1 provides a summary of the operational analysis of the various interchange configuration alternatives. Each alternative is scored based on how well they satisfy the stated design criteria on a 1 to 4 scale, with 1 being the lowest score and 4 being the highest score for a given criteria.

Table 2.1
Interchange Configuration Operational Analysis Summary

Operational Component	Conventional Diamond	Compressed Diamond	Partial Cloverleaf	Compressed w/ Roundabouts
Geometrics				
Horizontal Alignment	3	4	2	3
Vertical Alignment	4	3	3	3
Efficiency				
Level of Service	2	3	2	4
Reserve Capacity	1	4	3	2
Queue Lengths	2	3	2	4
Safety				
Projected Crash Ranking	2	2	3	3
Projected Injury Ranking	2	2	2	4
Least number of conflicts	2	3	2	4
General Operations				
Free Flow for Major Movements	3	3	3	4
Driver Expectancy	4	4	2	3
Totals:	**25**	**31**	**24**	**34**

Source: *Operational Analysis,* Morrison-Maierle, 2005

Table 2.2 provides a summary comparison of the interchange configuration alternatives with regard to operational characteristics, physical size or footprint of the alternative, construction cost, and potential impacts to the surrounding built and natural environment.

Table 2.2
Interchange Configuration Screening Summary

Alternative	Operational Characteristics	R-o-W (in acres)	Cost (in millions)	Potential Impacts
A – Conventional Diamond	25	96	$ 29.7	Greatest impact on residential development in NW quadrant
B – Compressed Diamond	31	62	$ 24.4	Least impact in all quadrants
C – Partial Cloverleaf	24	80	$ 26.2	Greatest impact on NE quadrant, but minimizes impact on NW quadrant
D – Compressed with Roundabouts	34	65	$ 25.9	Second least impact in all quadrants

Source: Morrison-Maierle, HKM Engineering, 2006
Note: The configurations and right-of-way requirements are based on a conceptual design and footprint that would accommodate projected traffic volumes through the year 2030. Aggressive growth in the Gallatin Valley has necessitated further assessment of capacity needs beyond the typical two-year planning horizon, thus it may be necessary to acquire more right-of-way to accommodate additional lanes on either the interchange ramps or crossroad in the future. This issue is described in more detail in Chapter 3 of this document.

Based on the screening results outlined in the two tables above, the following recommendations were made to the Belgrade Interchange Sub-Committee:

- The **Conventional Diamond** interchange configuration has the highest cost and greatest right-of-way requirements, but does not provide a commensurate increase in geometric or operational efficiency. This alternative has been **eliminated** from further consideration.

- The **Partial Cloverleaf** interchange configuration was designed to avoid impacts to the residential area, but imposes a substantial impact on the gravel pit operations. This impact on the gravel pit would be approximately 18.7 acres greater than that imposed under the Compressed Diamond Alternative. This impact is difficult to justify based on the low geometric and operational score and higher cost relative to other alternatives. This alternative has been **eliminated** from further consideration.

- The **Compressed Diamond Interchange with Roundabouts** alternative provides the best operational value with only a marginal increase in cost compared to the Compressed Diamond interchange configuration. The impacts are similar to those of the Compressed Diamond interchange. Based on the minor difference between this alternative and the Compressed Diamond alternative, this configuration has been eliminated as a stand-alone alternative but **forwarded as a "design option"** that could be implemented instead of signalized intersections with the Compressed Diamond interchange.

2.3 Alternatives Eliminated from Further Evaluation

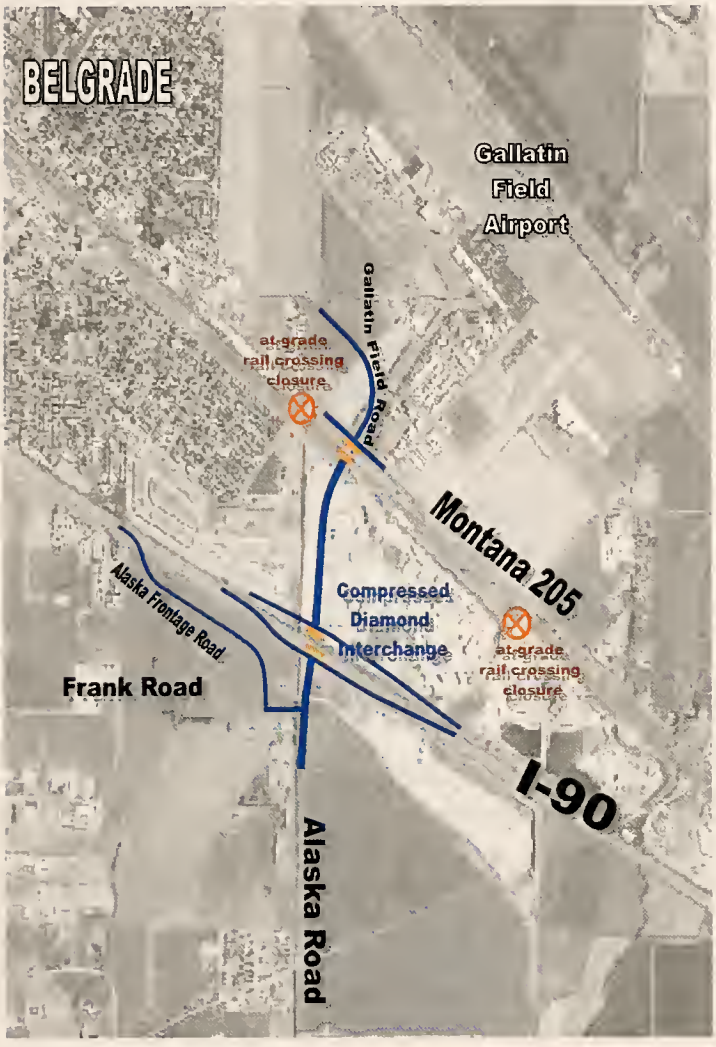
- The **Single-Point Urban Interchange (SPUI)** is a version of a compressed diamond interchange that is configured to minimize the area of land occupied by the interchange. It is accomplished by tucking the diamond ramps very close into the freeway fill slopes (using retaining walls if necessary) and intersecting all four ramps at one point with the crossroad. That single point of intersection is located (in this case) directly below the Interstate. This is a very efficient form of interchange from an operational and right-of-way standpoint; however, it is a very costly configuration due to the much larger single-span structure required and the large amount of retaining wall typically required.

- An **interchange located west of Belgrade** was considered early in this process based on previous planning efforts and public input received during the development of this proposed project. While an interchange west of Belgrade may be desirable and even warranted from a development trend perspective, it does not address the same needs as the interchange proposed in this document. Other proposals for an interchange west of Belgrade would require the same process outlined in Chapter 1 (See Transportation Commission Policy 13 discussion).

- An **interchange located further east of Belgrade** was considered based on previous planning efforts and early public comments. The *Belgrade Area Transportation Plan* recommended a new interchange "in the area generally between Alaska Road and Love Lane, extended." The proposal to locate the interchange at Alaska Road is consistent with this recommendation; however, it appears that an interchange east of the proposed location would serve local traffic but would not be optimal for regional access to Belgrade and the Airport. Based on guidance from FHWA, new Interstate access is intended to address regional transportation issues rather than localized traffic concerns. A far easterly access point is not justifiable in light of FHWA guidance, the cost of new right-of-way, the cost of extending Love Lane, and the opportunities presented by the location currently under consideration.

2.4 Identification of the Preferred Alternative

An overview of the primary elements of the Preferred Alternative is outlined below.



- New Compressed Diamond Interchange (with potential for roundabout intersection control)
- South connector roadway from Alaska Road to the interchange
- North connector roadway from the interchange, under the railroad, connecting with MT 205, and to Gallatin Field.
- Realignment of Alaska Frontage Road.
- Structures to grade-separate connector roadway from the interstate and the railroad.
- Closure of two current at-grade crossings.

Memorandum of Understanding and Funding Options

Responsibilities for funding, implementation, and mitigation of impacts are outlined in a written agreement between Gallatin County, the City of Belgrade, and the Gallatin Airport Authority, and in the Memorandum of Understanding between the Montana Department of Transportation and Gallatin County. A Memorandum of Understating (MOU) between Gallatin County and the Montana Department of Transportation was signed on June 19, 2008. This agreement establishes the roles, responsibilities, and commitments relative to the planning, sequencing, costs, administration, design, construction, and maintenance responsibilities necessary for the planning and construction of a new Interstate 90 interchange. A full copy of the MOU is available in Appendix C of this document.

The total funding package is unknown at this time. This proposed project has received an earmark and Interstate maintenance funds, however, these funds are not sufficient to complete

the entire project (design, right-of-way, utilities, construction, etc.). Additional funding must be secured prior to project construction. The funding roles and responsibilities will be addressed in a supplemental agreement to be signed by all parties and considered in conjunction with the Memorandum of Understanding between Gallatin County and MDT for the interchange listed in Appendix A.

This project is anticipated to include two phases for design and phases for right-of-way, utilities, and construction. The first phase of design is the Environmental Assessment and decision document. This phase is the responsibility of Gallatin County. The next phase would be final design, if the decision is to move forward with the proposed project. The final design phase is included in the 2008-2012 Montana Department of Transportation Statewide Transportation Improvement Program. Additional funding will be necessary to forward into the construction phase.

3.0 RESOURCES, IMPACTS, AND MITIGATION

This chapter contains information on potential social, economic, and environmental resource impacts due to the proposed action. This information was developed in cooperation with state and federal agencies, Gallatin County officials, City of Belgrade staff, representatives of the Gallatin Airport Authority, and members of the general public. NEPA/MEPA and the FHWA Technical Advisory (T6640.8A) outline specific areas of environmental concern to be addressed through environmental analysis. Resources evaluated and found to have no impacts were identified in the Foreword of this EA. These included:

- Parks and Recreation/ NL&WCF - Section 6(f) Lands
- Environmental Justice
- Air Quality
- Floodplains
- Threatened and Endangered Species
- Hazardous Waste

The following sections provide a description of those resources where impacts are anticipated.

3.1 Land Use/Right-of-Way/Easements

Land use in the immediate project area is dominated by the Gallatin Field Airport and a large gravel pit located immediately south of the main entrance to the Airport on either side of I-90. Private residential properties are located just beyond the western boundary of the Airport. Two mobile home parks are located adjacent to MT 205 near the southwestern boundary of the Airport property. Another residential neighborhood is located between MT 205 and I-90 on the western boundary of the proposed project. Scattered rural residential areas and undeveloped pasture land are located outside the Belgrade City boundaries to the south of I-90 adjacent to the Alaska Frontage Road.

According to the 1993 Belgrade Zoning Map, the proposed project lies within the City of Belgrade zoning jurisdiction. The project area is located within five City zoning designations including highway business, agriculture/suburban, and light manufacturing. Figure 3-1 illustrates zoning in the proposed project area. The 1999 *Belgrade Area Plan* recognized that, "[t]he City of Belgrade itself is nearly fully developed. With the exception of some potential 'in-fill' projects in residential areas, the City cannot increase its supply of subdivision lots without annexing additional property." Additionally, the 2002 *Belgrade Area Transportation Plan* identified areas south of I-90 as likely experiencing high growth over the next two decades.

Growth trends in the last twenty years in the Gallatin Valley have tended towards low density suburbanization. As new and/or relocating residents settle in the region, they tend to seek a balance between affordability and convenience, resulting in continued expansion of the suburban communities and other outlying areas. For example, as land becomes less available and more

expensive in the Bozeman area, pressure increases for development in Belgrade, Manhattan, Amsterdam, and other small communities near Bozeman.

There has been a growth in the number of subdivisions in unincorporated County jurisdiction. The resulting increase in distance between work and home and other community amenities has created the need for additional transportation facilities and services. These transportation needs are often assessed through state and federal transportation studies under NEPA and MEPA, and the studies, in turn, often lead to new transportation facilities and services. Transportation improvements, over time, enhance accessibility throughout the region and thus increase land attractiveness and value. As land values increase, land use becomes more intensive. More intensive land use creates new transportation needs, and the cycle continues.

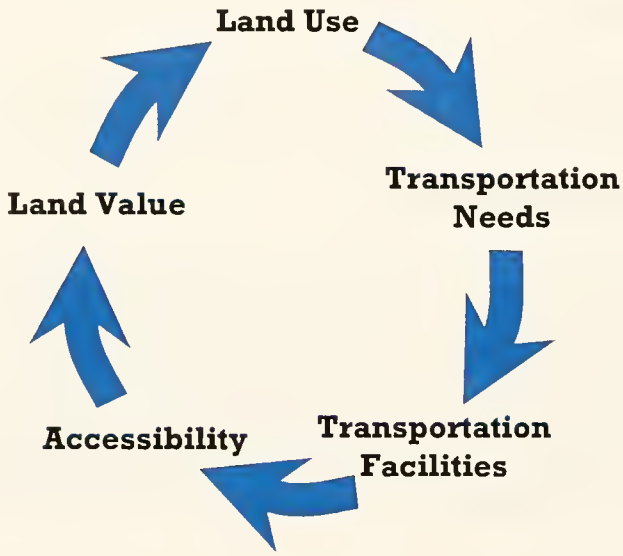


Figure 3-1
Belgrade Zoning Map

Legend

- Public Lands/Inst. (PL-1)
- Highway Business (B-2)
- Light Manufacturing (M-1)
- Residential (R-1, R-2M, R-3)
- Agricultural/Suburban (AS)

Adapted from Belgrade Official Zoning Map

Impacts

Regardless of what transportation investments occur, future development trends will be composed of infill consistent with adjacent land uses and approved zoning, and the character of the study area will not change from what is anticipated or already planned. The area will continue to become more urbanized with residential and light manufacturing developments in the immediate project area.

Land Use

The effects of transportation in facilitating physical development are not necessarily the same as its effects on economic growth. If a region is growing economically, development will occur somewhere within or near it. Combined with the effects of land use and local government zoning policies, transportation investments may influence the *location* of growth, but they alone do not *cause* the growth. As indicated by the cycle above, these proposed transportation improvements may increase the attractiveness and value of the land in the immediate project area, but they will not result in a change in planned land use. Thus the changes in land use are considered an indirect impact of transportation improvements, but not necessarily a direct effect.

Concerns were raised through the public involvement process that additional Interstate access may have an undesirable effect on the currently undeveloped, rural character of the area. If growth is inevitable in a region, and the location is merely dependent upon the provision of adequate service, opponents contend that transportation improvements will encourage more trips, longer trips, and relocation from high-density areas where trips would be shorter to low-density areas with longer trips. As the City of Belgrade grows into Gallatin County, the existence of new roads may influence the placement of subdivisions or businesses, but this is only one factor among many that influence growth. Other factors include land use/zoning policies; regional, economic, and population factors; the availability of infrastructure; and the quality and availability of public resources, including schools.[1]

In the end, the Preferred Alternative itself would improve access, shift traffic patterns, and generate time savings for travelers. Growth in the area will not be dictated by infrastructure improvements, but more likely by land use decisions made by the City of Belgrade and Gallatin County. The County has committed to maintaining the existing zoning within the project area through the design year.

Right of Way and Easements

Some right-of-way will be required throughout the project area to accommodate the proposed interchange facility and connector roads. Under the Preferred Alternative, right-of-way needs for these improvements are estimated as follows:

Project segment:	**Acres of new right-of-way:**
Proposed interchange area:	62
MT 205	2.2

If the interchange or other actions or policies undertaken by the City, County, state, or federal agencies results in unforeseen growth, additional modifications to the interchange may become necessary in the future. The conceptual design for the Compressed Diamond configuration is currently proposed with a two-lane crossroad between the ramp terminals, and a third lane necessary for northbound traffic from the northern ramp terminal to MT 205. This configuration would be adequate to achieve LOS C through the year 2030 with projected volumes, and has enough reserve capacity to absorb an additional 25 percent increase over the current forecast.

[1] FHWA. 2005. Induced Travel: Frequently Asked Questions. http://www.fhwa.dot.gov/planning/itfaq.htm

Final design and right-of-way for the proposed interchange will be established to provide for expansion of the crossroad from two through-lanes to four through-lanes in the future. For example, the Interstate bridges over the crossroad would be constructed initially with spans of sufficient length to construct the additional lanes in each direction, if and when needed. When the additional through lanes are added, the southbound through-movement at the north ramp terminal can be expected to have a reserve capacity of 78 percent. All other critical movements are expected to have capacities to absorb more than double the predicted 2030 traffic volumes. By inspection, a four-lane crossroad can be expected to operate in the LOS B range.

An expansion to four through-through lanes would also allow for other operational changes such as double left-turns from the ramps onto the crossroad. These changes would provide further increases in the capacity of the system.

Relocations

One existing mobile home would require relocation by the proposed interchange action. This home lies in the southwest quadrant of the proposed interchange and would be impacted by the proposed relocation of Alaska Frontage Road as part of the interchange construction.

Mapping for ongoing residential development in the northwest quadrant of the proposed interchange identifies 29 townhouse units, two of which would be directly impacted by the westbound on-ramp of the proposed interchange.

These impacts and relocations are illustrated in Figure 3-2.

Figure 3-2
Right-of-Way Impacts and Relocations

Mitigation

Right-of-way requirements have been minimized through the selection of the Compressed Diamond interchange configuration, minor shifts in the alignment of the interchange and

crossroads, utilization of existing right-of-way for many of the surface roadway improvements, and collaboration with adjacent landowners to identify agreeable impacts, roadway alignments, and access points. Right-of-way requirements could increase slightly if the roundabout design option is included as part of the Preferred Alternative. This design option would not result in additional relocations.

All lands needed for right-of-way under the proposed action which are in private ownership would be acquired in accordance with both the *Uniform Relocation Assistance and Real Property Acquisition Act of 1970* (P.L. 91-646), and the *Uniform Relocation Act Amendments of 1987* (P.L. 100-17). Compensation for right-of-way acquisitions would be made at "fair market value" for the "highest and best use" of the land.

3.2 Farmlands

Pursuant to the Farmland Protection Policy Act, an inventory of farmland within the study area has been completed. According to a review of the soils mapping provided by the U.S. Department of Agriculture – Natural Resource Conservation Service, the proposed project area is located on lands designated as Farmland of Statewide Importance. The gravel pit and Airport were not analyzed due to the fact that these areas have already been converted from agricultural use.

Figure 3-3
Important Farmlands

The 2002 *Belgrade Area Transportation Plan* identifies undeveloped lands from downtown south to Cameron Bridge Road as high growth areas. The 1999 *Belgrade Area Plan* expresses concern for the preservation of farmland and open space. The 1999 *Plan*'s land use policies also encourage development that maintains the distinction between city and countryside and the establishment of buffer zones between people and certain types of industrial and agricultural land.

Impacts

Since the majority of the land north of I-90 is developed or in commercial/Airport use, the analysis focused on lands to the south of I-90. To the south of I-90, much of the land along Alaska Road is in irrigated crop production and dry-land pasture.

Mitigation

In accordance with the Farmland Protection Policy Act, a Farmland Conversion Impact Rating Form has been completed for this proposed project. Both the Preferred Alternative and the No-Build Alternative result in total points of less than 160; therefore, under the provisions of 7 CFR 658.4(c)(2), no additional consideration for protection is necessary. A copy of the form is included in Appendix B.

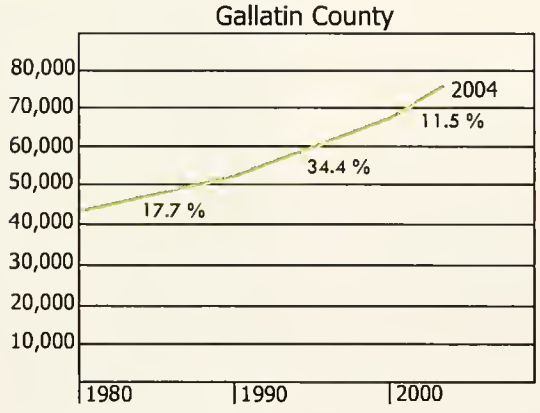
3.3 Social Conditions

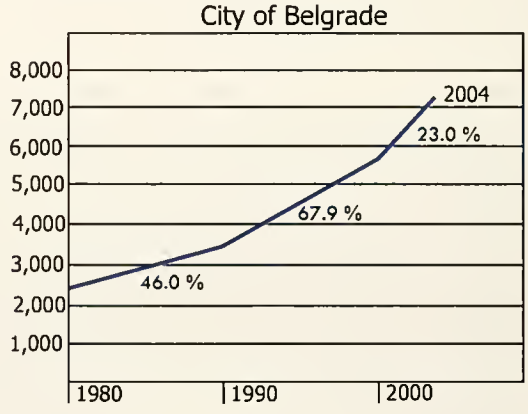
This section describes the general community characteristics and social conditions in the study area, including City and County population, demographic and income data, community and public facilities, and parks and recreational facilities. This section also addresses impacts on the traveling public and other users of the existing and proposed transportation facility, and impacts on community cohesion.

Population Data

As illustrated below, Gallatin County has experienced continuous growth over the past 25 years. In 1980, the population of Gallatin County was 42,865. The population grew to 50,463 in 1990, an increase of over 17 percent in 10 years. During the past 25-year period, the County experienced its greatest growth between 1990 and 2000 when the population increased by over 34 percent to reach 67,831. Population estimates for 2004 show that the population grew to 75,637, an increase of 11.5 percent in just four years.

Like Gallatin County, the City of Belgrade has experienced continuous growth over the past 25 years. In 1980, Belgrade's population was 2,336. Belgrade grew to 3,411 in 1990, an increase of 46 percent. By 2000, Belgrade's population had reached 5,728, more than double its population from 1980 and a 68 percent increase over the 1990 figure. Population estimates indicate that Belgrade grew by an additional 23 percent to reach 7,046 people in 2004.





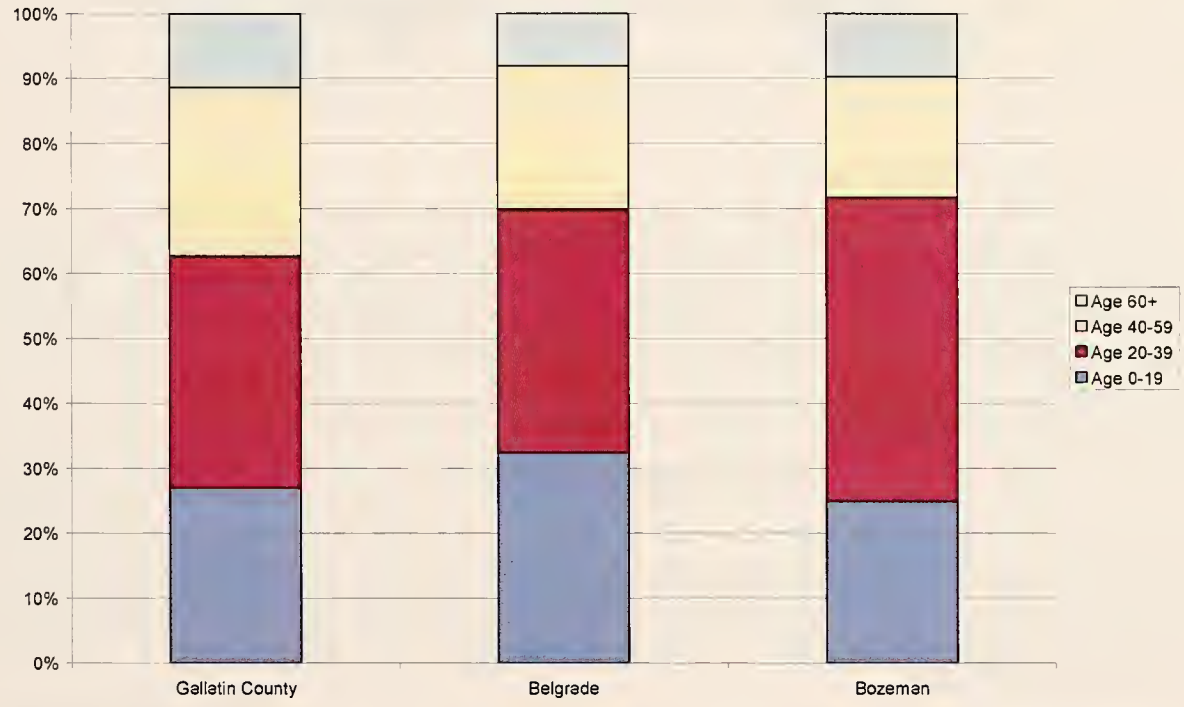
Source: U.S. Census Bureau, 2000.

The City of Belgrade accounted for over 13 percent of the growth that occurred in Gallatin County between 1990 and 2000 (2,317 people out of 17,368). NPA Data Services Inc., a Washington, D.C.-based economic research, forecasting, and data development firm, has projected county populations into the year 2025, but no projections are available by place. Assuming Belgrade continues to maintain the same percentage of Gallatin County's overall population growth into the future, the community is projected to gain 3,058 residents between 2005 and 2025 for a total population of 9,718 in 2025. This represents a 46 percent increase in population for the period 2005-2025. The annual average growth rate for the 20-year period from 2005 to 2025 is projected to be approximately two percent per year.

Demographic Composition

Figure 3-4 shows the demographic composition of Belgrade is similar to that of Gallatin County. The majority of people in both Gallatin County (62.7 percent) and Belgrade (69.9 percent) are under the age of 40. Bozeman has a larger percentage of young people (age 20-39) than Belgrade or the County as a whole; this is likely due to the presence of Montana State University. Belgrade has a higher percentage of children. Both Gallatin County and Belgrade are predominantly white (over 97 percent in each case), with a minority population of approximately three percent in each jurisdiction.

Figure 3-4
Demographic Composition of Gallatin County and the cities of Belgrade and Bozeman



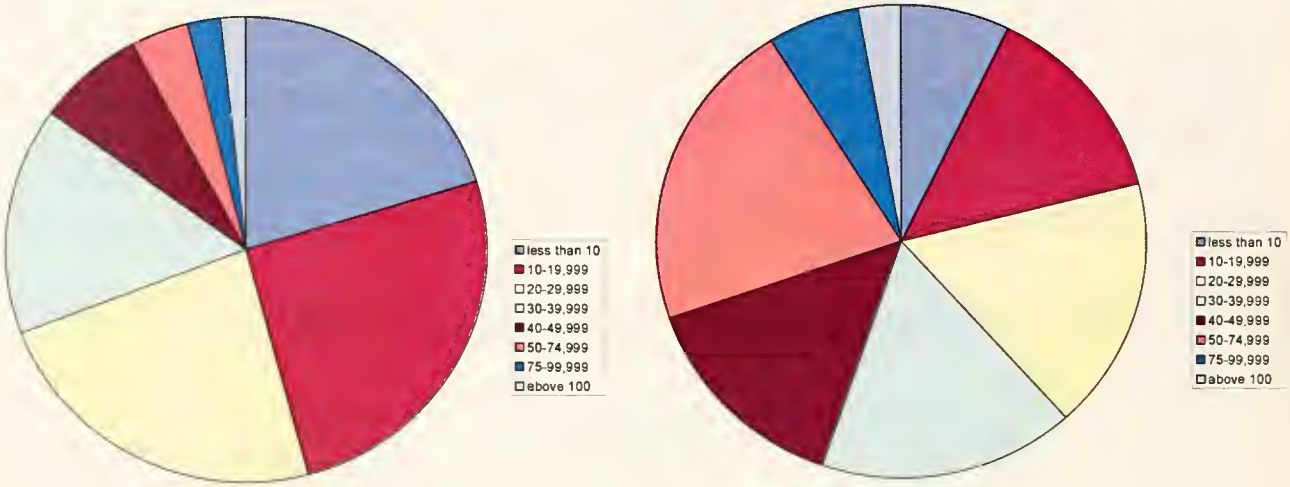
Source: U.S. Census Bureau, 2000.

Household Income

In 2000, the median household income was $38,120 in Gallatin County and $37,392 in Belgrade. Twenty-one percent of Belgrade households and 22.5 percent of Gallatin County households earn less than $20,000 per year. The largest percentage of households in both Gallatin County (27.5 percent) and Belgrade (31.5 percent) earn between $30,000 and $49,999 per year.

There has been a substantial increase in income in Belgrade over the past decade. In 1989, the median income in Belgrade was $22,044 (in $1990). Figure 3-5 shows this change clearly: in 1990, almost half the households in Belgrade had incomes less than $20,000 and by 1990 this group had shrunk to less than one-quarter of the households.

Figure 3-5
Belgrade Household Income, 1990 and 2000 (in $1990 and $2000, respectively)



Community and Public Facilities

There are a number of community facilities and public services located in the City of Belgrade, including several schools, the Belgrade Public Library, the Belgrade Fire and Police Departments, and City Hall. None of these facilities are in proximity to the proposed interchange project. These facilities will not be impacted by the Preferred Alternative.

Parks and Recreational Facilities

There are several public parks and recreational facilities within the Belgrade area, all of which are located outside the project area. These facilities will not be impacted by the Preferred Alternative. A trail is planned in the Las Campanas development in the northwest quadrant of the proposed interchange. The developers indicate that this trail is on private property and will be developed and maintained by private entities. This type of facility does not qualify for Section 4(f) protection.

Travel and Access

During the scoping and alternatives development and analysis stages of the project development process, public participants questioned the proposed location of the interchange as well as the potential impact of a new interchange access on the local street network. Alternate interchange locations are discussed later in this chapter. The discussion below focuses on the localized impact of a new interchange access.

The concern expressed by local residents is commonly referred to as "induced travel" and is a frequent topic of discussion in transportation planning. Induced travel is a term used by economists to describe the additional demand for travel that occurs as the generalized cost of

travel decreases.[2] The theory of induced vehicle travel suggests that increases in carrying capacity of a specific highway corridor will result in an increased level of vehicle traffic due to a decrease in the cost of travel, especially the time costs of travel. Generally, induced travel applies to new highway carrying capacity; for example, the widening of a highway to improve LOS. The new interchange itself cannot be categorized as increasing highway capacity; rather, it would improve access. Because the interchange would shift traffic patterns rather than create new demand (as, for example, a new highway or substantial highway improvement might), the proposed project would not, by itself, induce traffic.

MDT maintains a traffic model to forecast how proposed transportation improvements may affect the overall transportation network in a given area based on housing and employment projections by the local government (although projections are based on data provided by outside sources). This model is developed and typically modified through the transportation planning process conducted every five to ten years. The model used for this analysis was developed for the *2005 Operational Analysis* conducted for this proposed interchange, and updated during the 2007-2008 Transportation Plan Update. The model includes all current and planned transportation improvements, and was used to compare the traffic operations both with and without the proposed interchange in place. Figure 3-6 illustrates the comparison of these two model runs.

The model indicates that by the year 2030, the Belgrade area street network will experience a substantive increase in traffic volumes based solely on the planned and approved development of residential, commercial, and light industrial areas that will add vehicle trips to the network. A comparison of the projected traffic on the network without the interchange to the model run with the interchange reveals that I-90 east of the proposed interchange, Alaska Road and MT 205 from Belgrade to the new interchange will experience an increase in traffic, all of which appear to be accessing the Interstate and traveling to/from Bozeman. The remainder of the network experiences either no substantive change or a decrease in projected traffic due to the new interchange.

The conclusion to be drawn from this comparison is that the proposed new interchange will successfully fulfill the purpose of providing regional access to the Airport without causing a negative traffic operation effect on the transportation network in the Belgrade area.

Community Cohesion

A trail is planned within the Las Campanas development in the northwest quadrant of the proposed interchange. This planned trail would be impacted by the westbound on-ramp of the proposed interchange, but would be relocated within the development or connected to the internal sidewalk system planned for that community. There would be no disruption to community cohesion since this trail is anticipated to be used almost exclusively by local residents.

Mitigation

No mitigation required.

[2] FHWA. 2005. Induced Travel: Frequently Asked Questions. http://www.fhwa.dot.gov/planning/itfaq.htm

Figure 3-6
Model Output Comparison

3.4 Economic Conditions

This section describes the general economic conditions and trends in the project area, including the commercial and residential development in the City of Belgrade as well as Gallatin County.

Commercial Development Market

Approximately 3,962 firms operated in Gallatin County in 2003. This represented an approximately 10 percent increase over the 2001 number (3,565) and a 20 percent increase over the 1999 figure (3,291). Over the past ten years, the number of commercial establishments has increased at a rate of approximately five percent per year. If this growth rate continues, the number of business establishments in Gallatin County will easily be more than 10,000 establishments over the course of the next twenty years. Limiting factors in this growth include land availability, housing costs, land use regulations, type of industries, wage and salary levels, public services, and infrastructure.

Within Belgrade, there has been a steady increase in the number of commercial development permits over the course of the past fifteen years, from between zero and five in the late 1980's and early 1990's, to seven in 2002, 11 in 2003, and 13 in 2004. This trend is illustrated in Figure 3-7.

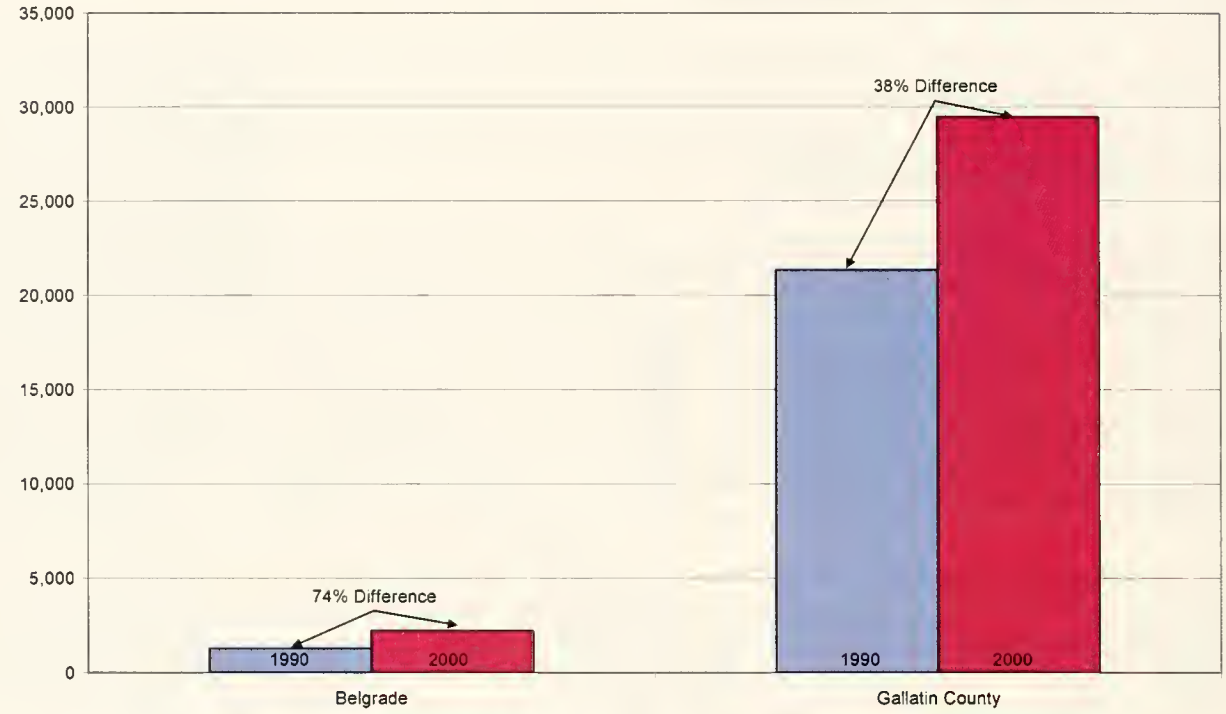
The number of active commercial enterprises in Belgrade has also grown steadily. Between 1998 and 2003, the number of business establishments in Belgrade increased by over 30 percent, from 346 to 518. Over 3,200 people were employed in the City of Belgrade in 2003, representing approximately 10.6 percent of Gallatin County's total employment. The largest employers in the City of Belgrade include Knife River (JTL Group Inc.), School District No. 44, Albertson's, and Lee and Dad's IGA.

Residential Development Market

Home-ownership in Gallatin County has grown over the past decade from 58.5 percent in 1990 to 62.4 percent in 2000. The opposite trend has occurred in Belgrade where homeownership decreased slightly from 64.9 percent in 1990 to 62.1 percent in 2000.

Between 1990 and 2000, the number of residential housing units in Gallatin County increased by over 38 percent. The number of housing units in Belgrade grew by over 70 percent during that same period.

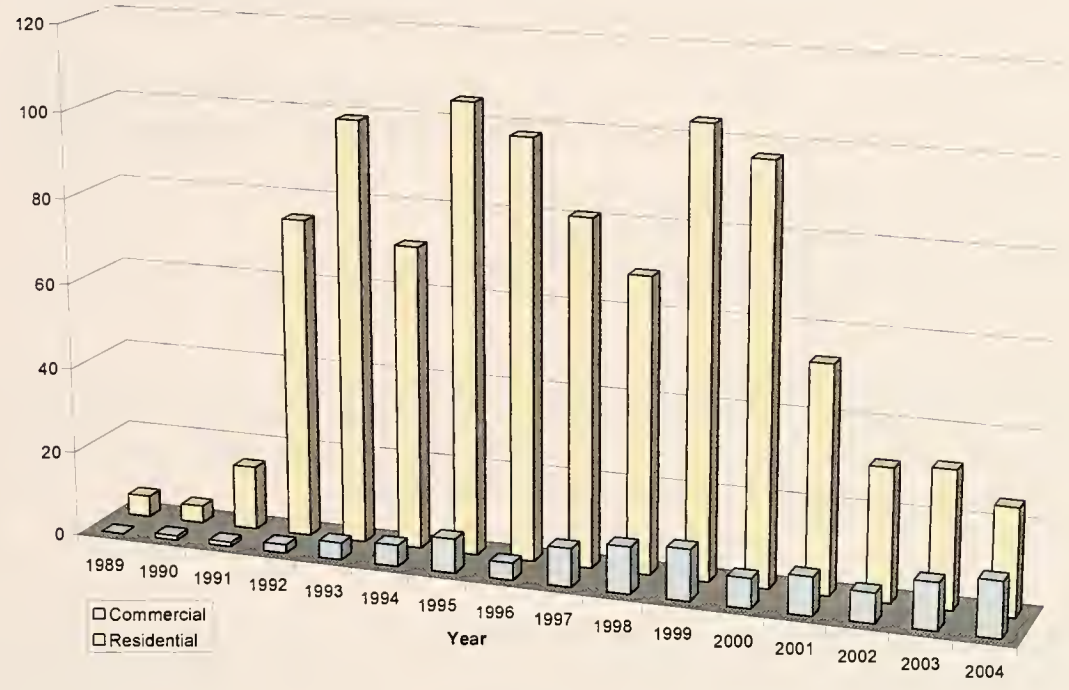
Figure 3-7
Total Housing Units, 1990-2000



Source: U.S. Census Bureau

As shown below in Figure 3-8, the number of residential building permits issued in Belgrade grew between 1997 and 1999, but decreased between 2000 and 2004. Based on discussions with City officials, a decrease existed in the latter years only because the City did not have adequate capacity at its wastewater treatment plant and could not issue more permits until it completed an expansion of that facility. This facility expansion was completed in 2005, and the City expects renewed growth in building permit applications. Between 1997 and 2001, the majority of residential development in Belgrade was single-family housing. Although single-family housing again constituted the majority of residential development between 2003 and 2004, the balance between single-family and multi-family development has gradually shifted over the years. In 1997, single-family development made up nearly 91 percent of all residential development, whereas single-family development dropped to 64 percent of total residential development in 2004.

Figure 3-8
Number of City of Belgrade-Issued Building Permits by Year



Impacts

The Airport serves as the regional transportation hub, providing access to regional tourist destinations as well as to central and southwestern Montana towns and cities, and its accessibility will continue to be important to the local and regional economies. The Preferred Alternative would provide improved access to the Airport and downtown Belgrade, and would compliment existing economic development trends in the area.

During the project development process, a concern was expressed that the proposed interchange would pull traffic out of downtown Belgrade, resulting in a loss of business downtown. However, traffic projections indicate that the average number of vehicles traveling through downtown will continue to increase, with or without the proposed interchange. Without the interchange, traffic would become congested and lengthy delays would be experienced. The proposed interchange would provide an opportunity for travelers destined solely for the Airport to avoid contributing to downtown congestion. By keeping the roadway open during construction and phasing construction along the corridor, only minor disruptions to business, residential, Airport, and tourist traffic are anticipated. Impacts on the local and regional economies from the No-Build Alternative would be negligible.

Mitigation

No mitigation is required.

3.5 Pedestrian and Bicycle Facilities

In 2001, the Gallatin County Trails Advisory Committee prepared a report for the Gallatin County Planning Board, entitled *Connecting Communities: Gallatin County Trails Report & Plan.* The *Plan* identified a trail linking Belgrade and Bozeman as the "highest-priority proposed trail in Gallatin County." There were three alternative corridors identified for this trail:

1. North of I-90 on the Interstate right-of-way
2. A boulevard trail along MT 205 north of I-90
3. South of I-90 from Jackrabbit Lane along Alaska then on the southern edge of the Interstate right-of-way.

The residential development in the northwest quadrant of the proposed interchange has identified a "linear park" along the boundary of their property. This "park" would include a large drainage swale as well as a trail. The trail would be privately constructed and maintained and not open to the public, and thus would not receive special protection from impacts.

Impacts

Neither the No-Build nor the Preferred Alternative would have an impact on plans to create a pedestrian/bicycle trail between the cities of Belgrade and Bozeman. The Preferred Alternative would provide an opportunity for pedestrians and bicyclists to cross the railroad and Interstate at the proposed interchange location through the use of a wide shoulder or dedicated bike/pedestrian lane. The planned trail within the residential area would need to be redefined and placed in a different location. This could be coordinated early with the developer since that trail has not yet been designed or constructed.

Mitigation

Since there are no current facilities in the project area, and no conflicts with current plans, no mitigation is necessary. Attempts would be made to accommodate the residential trail adjacent to the proposed Interstate ramps, but may need to be constructed within the development or a path designated on their internal sidewalk system.

3.6 Noise

FHWA produced guidelines for highway traffic noise analysis in the *Highway Traffic Noise Analysis and Abatement, Policy and Guidance* (revised June 1995), and MDT supports these guidelines through its own *MDT Traffic Noise Analysis and Abatement: Policy and Procedure Manual* (June 2001). These policies define two conditions under which receptors (i.e. residences, schools, churches) are considered "impacted" by noise. First, receptors are considered impacted if predicted noise levels approach or exceed the Noise Abatement Criteria (NAC) shown in Table 3.1. These noise level criteria are in terms of the A-weighted, hourly averaged equivalent level (Leq) for the loudest hour conditions. The criteria are listed according to activity or land use, with the most sensitive land uses listed first. Residential receptors fall

into Category B. To allow for some flexibility in the policy, MDT determined that receptors should be considered impacted where predicted noise levels approached their respective NAC. MDT defines "approach" as within one (1) dBA. Secondly, receptors are considered impacted if predicted design-year noise levels exceed existing noise levels by 13 dBA or more.

Table 3.1
FHWA and MDT Noise Abatement Criteria
Hourly A-Weighted Sound Level in Decibels (dBA)

Land Use Activity Category	Leq(h) dBA	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Cemeteries, commercial areas, industrial areas, office buildings, and other developed lands, properties, or activities not included in Categories A or B above.
D	No Limit	Undeveloped lands, including roadside facilities and dispersed recreation. (A new or proposed subdivision meeting the requirements of Section A1 is Category B, not D).
E	52 (Interior)	Motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums. (The interior criterion only applies when there are no exterior activities to be affected by traffic noise.)

Notes: A-weighted Decibel = dBA
These sound levels are only to be used to determine impact. These are the absolute levels where abatement must be considered. Noise abatement should be designed to achieve a substantial noise reduction – not the noise abatement criteria.
Source: Federal Highway Administration. *Highway Traffic Noise Analysis and Abatement*, June 1995, and *MDT Traffic Noise Analysis and Abatement: Policy and Procedure Manual* (June 2001).

Impacts

According to the Federal Aid Policy Guide, *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (23 CFR 772), this project qualifies as a Type I project as a "proposed Federal or Federal-aid highway project . . . which increases the number of through-traffic lanes . . . increases the volume or speed of traffic . . . [or involves] the addition of an interchange/ramp to an existing highway." The FHWA's Traffic Noise Model (TNM) Version 1.0 computer program was used to predict the traffic noise levels due to the No-Build Alternative and the project alternatives.

The analysis area and impacted receptors are illustrated in Figure 3-9, and technical results of the analysis are shown in Table 3.2.

Figure 3-9
Noise Monitoring and Impact Locations

Noise impacts are predicted at ten receptors under existing conditions, 12 receptors under a No-Build scenario, and 13 receptors for a Build scenario in the vicinity of the proposed interchange. The dominant noise source in the area is, and will be, traffic on I-90, whether or not the project is constructed. Construction of the proposed interchange does not cause the noise impacts for these receptors; however the slight grade change along the Interstate embankment may result in an impact to one additional receptor.

Table 3.2
Receptors and Predicted Noise Levels for the No-Build and Preferred Alternatives

Receptor Description	Existing 2002 $L_{eq}(h)$ (dBA)	No-Build 2030 $L_{eq}(h)$ (dBA)	Preferred Alternative 2030 $L_{eq}(h)$ (dBA)
18 residential sites at Las Campanas development (currently under construction)	61-71	63-73	**68-74**

Note: Noise levels shown in **bold** text indicate an exceedance of the Noise Abatement Criteria.
Source: Big Sky Acoustics, 2006

Mitigation

Noise mitigation measures were considered for the receptors impacted by either existing I-90 traffic or proposed improvements. The only practicable alternatives that could be implemented would be to construct noise walls or barriers; however, this abatement measure is not reasonable given the high cost of construction. The cost of the noise barriers necessary to achieve a reduction in noise exceeds the threshold set by MDT for reasonable noise abatement. Therefore, no noise mitigation is proposed.

3.7 Water Quality

The quality of runoff from roadways is impacted by vehicle-related contaminants, such as motor oil, grease, and tire rubber. In addition, surface water runoff is impacted by herbicides and pesticides that may be used in landscaped or maintained areas along the highway.

Impacts

There would be an increase in the total surface area of paved road related to widening and reconstruction. This increase in total road surface area decreases the overall permeability of substrate and increases the rate and quantity of surface water runoff from the roadway.

Mitigation

The Preferred Alternative may impact water quality through storm water runoff and erosion. Mitigation of these impacts is achieved through engineering controls, such as grading, re-vegetation, design of culverts/ditches, and various Best Management Practices. Construction of any of the Build Alternatives will require a Stormwater Pollution Prevention Plan and field monitoring/oversight to ensure that impacts to water quality due to construction along any of the proposed alternative alignments is minimal.

3.8 Wetlands

Impacts

No impacts to wetlands are anticipated.

Mitigation

With no impacts anticipated, no mitigation is required.

3.9 Waterbodies, Wildlife Resources, and Habitat

The Biological Resources Report (BRR) prepared for the proposed project provides an accounting of the terrestrial and aquatic species, and species of concern that are known to occur or could occur within the proposed project area. The information below is a summary of potential impacts and mitigation measures for biological resources.

Irrigation Ditches

The Spain-Ferris Fork Ditch parallels Alaska Road, crosses under the Interstate in a pipe, and daylights on the airport property to the north. Water in this ditch that flows north onto the airport property disperses in fields on the property and has no return flow to any waters of the U.S.; therefore, the ditch is not jurisdictional under US Army Corps of Engineers regulations.

Waterbodies and Aquatic Resources

The project is on the western edge of a network of irrigation ditches that divert water from the West Gallatin River for hay production and other beneficial uses. These ditches are true ditches, as opposed to channelized streams. Fish may stray into these ditches but they are not designed to act as fisheries. Fish that do use the ditches are most likely lost to the fishery because as water levels recede in the ditches at the end of irrigation season, they may not be able to navigate back to the river. The area surrounding the Airport and the City of Belgrade is arid and there are no natural waterbodies within the project area. No rare or sensitive aquatic species were identified within the project area.

Wildlife Resources

The areas that would be affected by the project are currently subject to frequent human disturbance, and represent poor habitat for small mammals, ungulates, birds, reptiles, and amphibians. During construction of the project, more mobile species such as adult birds, deer, and other mid-size and large mammals would move to adjacent habitats to avoid direct mortality from construction activities.

Habitat

The project area contains little habitat diversity. Limited edge habitat occurs along the perimeter of the gravel pits where trees, shrubs, and tall grasses exist. The gravel pit is largely devoid of vegetation and the area directly surrounding the gravel pit is dominated by non-native grass and forb species. The entire project area contains non-native weedy forbs and grasses that probably invaded the site after human-caused disturbances.

Species of Concern

Twenty-four plant species of concern occur in Gallatin County. Of these, the dwarf purple monkeyflower, small dropseed, and slender wedgegrass are plant species of concern that have been found within ten miles of the project site. None were observed during the field survey of the project area.

Noxious Weeds

Seven noxious weeds were observed in the project area. Five of these species are listed on the statewide noxious weeds list and two species are listed as noxious by Gallatin County. The following weeds were found in the project area: musk thistle, spotted knapweed, Canada thistle, poison hemlock, field bindweed, houndstongue, and sulfur cinquefoil.

Impacts

The interchange itself will be located predominantly within the gravel pits, reducing the likelihood for direct mortality.

Direct impacts to plants include the removal of vegetation during the clearing and scraping stages of construction, and loss of habitat due to road widening and realignment. Because of the scope and intent of the project, these are considered unavoidable impacts. In the case of weedy species, these impacts may be beneficial to the site by removing the seed source in the area.

The construction of the Preferred Alternative would affect the noxious weed species in the project area to different degrees. Canada thistle, spotted knapweed, and houndstongue are the most prevalent in the project area, occurring in the ditches and along the roadways. Although field bindweed, sulfur cinquefoil, poison hemlock, and musk thistle occur in low densities in the project area, they have the potential to increase after disturbance.

Mitigation

Since there would be no impacts to fisheries or aquatic resources as a result of this project, no mitigation would be required beyond the MDT Standard Specifications. An SPA 124 authorization will not be required.

Since no rare, endangered, threatened, sensitive species, or species of concern were identified during the site visit or the subsequent review, no mitigation related to the project is anticipated.

Upon completion of the project, disturbed areas would have topsoil added and will be seeded, mulched, and fertilized to re-establish desirable grasses and forbs. This restoration will provide habitat similar to what currently exists. Therefore the direct impacts to wildlife are considered short-term and minimal.

All construction activities are required to comply with the Montana Noxious Weed Law, MDT Standard Specification 107.11.5, titled Noxious Weed Management; the Noxious Weed Management Act (MCA 7-22-21); and any Gallatin County noxious weed control requirements.

3.10 Cultural/Archaeological/Historic Resources

A number of cultural, archaeological, or historic sites of interest were identified in the vicinity of the project area. Only those determined to be on or eligible for listing on the National Register of Historic Places (NRHP) were considered in this analysis. Of the eligible sites identified, the Spain-Ferris Fork Ditch (24GA0743) and the Northern Pacific Railroad Main Line (24GA1096) have the potential to be impacted by this Preferred Alternative. These sites are illustrated in Figure 3-10 below, and a brief description of each follows:

Northern Pacific Railroad Main Line (24GA1096) – The Northern Pacific Railroad was completed in 1883 as part of the second trans-continental railroad, and has played a substantive role in the historic growth and development of Montana and the Gallatin Valley. It was important for its role in the transport of goods and supplies related to agricultural, forestry, mining, and manufacturing industries, as well as transporting tourists to and from Yellowstone National Park. While much of the original line has been modified and replaced during routine maintenance over the past 140 years, it is considered eligible for listing on the NRHP due to its association with history of the area.

Spain-Ferris Fork Ditch (24GA0743) – This ditch flows north, adjacent to, and paralleling the east side of Alaska Road from the intersection with Valley Center Road, under I-90, to a terminus on the airport property where the original ditch was abandoned and filled in during airport expansion in the 1960's. The ditch segment along Alaska Road is a typical non-lined

earth excavated ditch ranging from 8 to 12 feet in width, three to four feet in depth, sometimes with side berms. Gate boxes and lateral ditches are evident along its length. Although the Spain-Ferris Ditch is one of the earliest remaining in the Gallatin Valley, it is not as extensive as some of the other ditch systems.

Figure 3-10
Historic Resources in Project Area

Impacts

Both the Spain-Ferris Fork Ditch and the Northern Pacific Main Line are oriented perpendicular to the proposed interchange and connector roadways. Complete avoidance of these sites is not possible, but impacts would be limited to piping short lengths of the ditch and temporary impacts to the rail line during construction. The SHPO has concurred with the following findings:

Site Name:	Site Number:	SHPO Determination:
Northern Pacific RR Main Line	(24GA1096)	No Adverse Effect
Spain-Ferris Fork Ditch	(24GA0743)	No Effect

A copy of the SHPO concurrence on these cultural resource impacts is contained in Appendix B, which also contains information related to Section 4(f) of the US Department of Transportation Act.

Mitigation

No mitigation is required.

3.11 Visual

As noted above, the project area is largely defined by two features: the Gallatin Field Airport and a large gravel pit located immediately south of the main entrance to the Airport. Mountains surround the Gallatin Valley and the town of Belgrade and are visible in nearly all directions. Looking north toward the main entrance of Gallatin Field, the immediate foreground is dominated by the Airport facility, with mountain views in the background. A row of evergreen

trees lines the entrance to the Airport, creating visual interest. To the northwest, the city of Belgrade occupies the foreground, with mountains visible in the background view. Striking features include the City water tower and a grain elevator. Looking south from the Airport entrance, the immediate foreground view is dominated by the gravel pit. Further south, views of the Gallatin Valley unfold. Residences are scattered between undeveloped pasture lands adjacent to the Alaska Frontage Road. Mountain views are visible in the background.

Impacts

The No-Build option would not affect the current view. Because the majority of the project elements in the Preferred Alternative would be located below the existing grade, there will be very limited visual impacts resulting from the Preferred Alternative. The new connection to MT 205 intersecting at the existing entrance to Gallatin Field would be depressed below the existing grade and therefore would not result in visual impacts. The new connection to Alaska Road on the south side of I-90 would follow the existing Alaska Road and Alaska Frontage Road alignments and would therefore have a visual impact limited to widening of the road. The interchange facility itself would be located within an existing gravel pit below grade and would not cause a deterioration of the existing viewshed. Construction of a new interchange in this area could facilitate reclamation of portions of the gravel pit which would improve the overall visual quality of the immediate project area, and provide an additional gateway entrance to Belgrade.

Mitigation

No mitigation is necessary.

3.12 Construction Impacts

Travel and Access

Construction activities from the Preferred Alternative would cause temporary inconveniences to area residents and airline travelers accessing the Airport by ground. These would occasionally result in longer travel times, detours, temporary closures, and noise and dust due to the use of heavy machinery. These disruptions would occur intermittently throughout the construction period.

Noise and Dust

Asphalt plants and gravel crushers that may be required for roadway construction for any of the alternatives would require air quality permits to be obtained by the contractor. Construction activities are also required to use dust suppression and control measures to minimize short-term impacts related to construction dust.

There would be minor, temporary noise impacts related to construction of any of the alternatives. The project's contractor would be subject to all state and local laws to minimize construction noise by having mufflers on all equipment. Dust control will also be implemented by using either water, or another approved dust-suppressant. During construction, surface water runoff could be contaminated by spills of petroleum products, lubricants, and hydraulic fluid from construction equipment. There would be a spill prevention and emergency containment plan made to provide

for mitigation of impacts related to such spills. In general, Best Management Practices will be used to minimize the effect of sedimentation and/or run-off during the roadway construction periods.

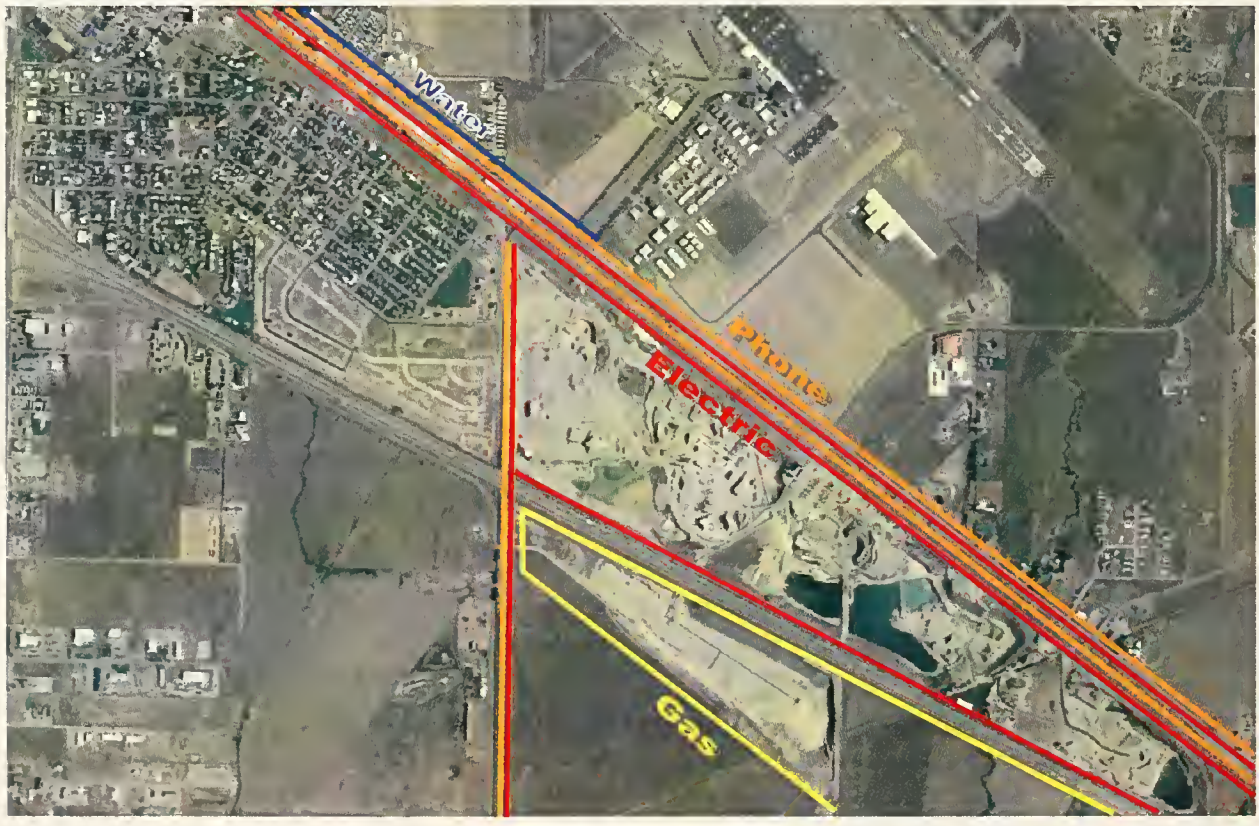
Railroad Traffic

The proposal to pass the new crossroad under the existing MRL rail line would require that the railroad tracks be temporarily relocated onto a shoofly during construction of the permanent bridge supporting the tracks over the roadway. The shoofly will allow trains to remain in service throughout the highway construction period by gently routing the trains around the permanent bridge construction.

Utilities

As illustrated in Figure 3-11, a number of public utilities have been identified in the project area which have the potential to be in conflict with the Preferred Alternative. These utilities include city water and sewer, electrical, fiber-optic and telecommunications transmission lines, natural gas pipelines, and cable television lines.

Figure 3-11
Existing Utility Lines



Utility relocations would be coordinated with the lines' owners, and done prior to this Preferred Alternative's construction. Notification of service interruptions due to these relocations will be the responsibility of these utility lines' owners. The disruptions are normally minor and are usually limited to the customers on the affected lines. A traffic control plan will be developed

and coordinated with local property owners to ensure reasonable access to residences and businesses during construction.

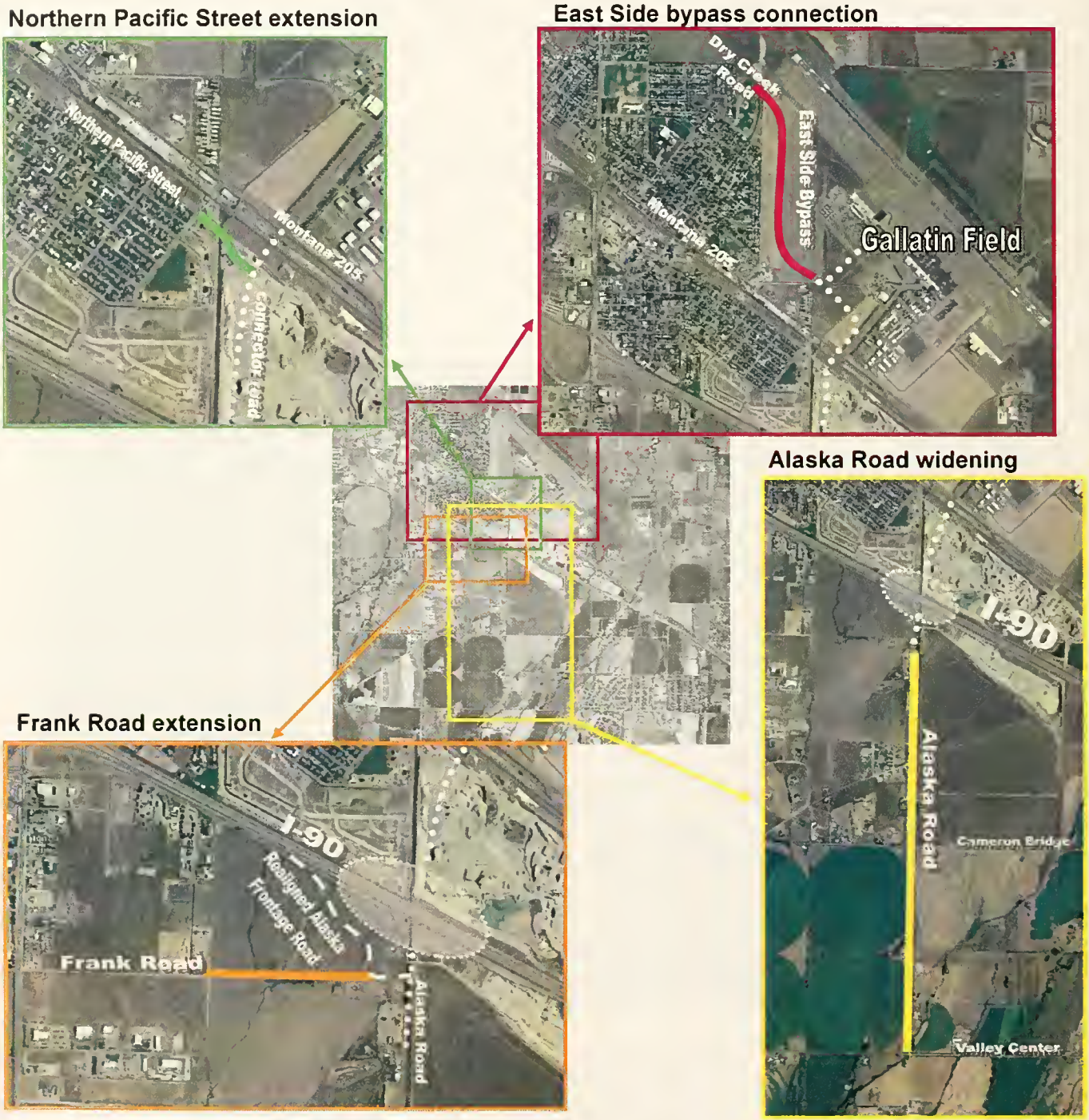
Mitigation

There is potential for short-term water quality impacts due to increased erosion and sedimentation during construction activities. Mitigation measures would be included in the Storm Water Pollution Prevention Plan (SWPPP) to ensure minimal impacts to water quality during construction.

All advance warning and detour signing would be in accordance with the Manual on Uniform Traffic Control Devices. Therefore, construction impacts from the proposed Build Alternatives will be minimized.

3.13 Cumulative Effects

While not part of the proposed federal action, the following potential local actions could enhance the overall roadway network operations in Belgrade. They are described here, but they are not part of the federally-funded project. These actions would be funded separately and coordinated by local authorities.



Northern Pacific Avenue could be extended from the residential area east to the new interchange connector roadway. Northern Pacific Avenue would remain a two-lane local roadway, and have a signalized intersection or a roundabout intersection at the connector roadway, depending on the final design concept selected. This extension would be completed concurrently with the interchange, and once the connector roadway is in place.

Frank Road could be extended to the east to connect with Alaska Road. Alaska Frontage Road would connect into Frank Road from the north. Frank Road would remain a two-lane roadway and "T" into Alaska Road. This action would take place concurrently with construction of the proposed interchange due to its relationship to the Alaska Frontage Road realignment.

An **East Side Bypass** roadway could be constructed along the western boundary of the Airport property. The alignment would be offset from the boundary to allow for future development of Airport-related support facilities. This bypass would extend from the newly constructed Gallatin Field Road on the south to Dry Creek Road on the north, a distance of approximately 1.3 miles. This action would take place concurrent with construction of the proposed interchange.

Alaska Road could be widened to accommodate the increased volume of traffic anticipated from the new Interstate access. Analysis indicates that up to five lanes could be required at some point in the future. Analysis suggests that three lanes would be sufficient for up to 20 years after construction if the surrounding properties were to be developed. The widening of Alaska Road could be accomplished in four ways: widen symmetrically on the existing centerline, hold the western right-of-way boundary and widen to the east, construct a new alignment entirely east of the irrigation ditch, or hold the eastern right-of-way boundary and widen to the west.

Other Area Actions

- The *Las Campanas* subdivision is a City project located west of Alaska Road and north of I-90. The subdivision will include 29 residential units. Access to the development will be provided by Yellowstone Avenue and North Alaska Road.

- *Valley Center Drive (Secondary Highway 235):* Two reconstruction projects are proposed between Reference Post 0.0 and Reference Post 4.5.
  - JCT MT 85-East (East Section) Reference Post 2.5 to Reference Post 4.5. Project is planned for construction in 2009.
  - JCT MT 85-East (West Section) Reference Post 0.0 to Reference Post 2.5. Project is currently not fundable for construction.

- *Belgrade Interchange (Montana Highway 85):* A Seal and Cover (Chip Seal) pavement Preservation project is proposed from Reference Post 6.1 to Reference Post 6.5. A summer of 2009 construction is anticipated.

- *Manhattan – Belgrade (Interstate 90):* A Seal and Cover (Chip Seal) Pavement Preservation project is proposed from Reference Post 289.4 to Reference Post 301.3. A summer of 2009 construction is anticipated.

- *Gallatin Field Road- East (Secondary Highway 205):* A Seal and Cover (Chip Seal) Pavement Preservation project is proposed from Reference Post 21.1 to Reference Post 26.8. A summer of 2009 construction is anticipated.

- *Jct MT 85 – East (East Section) (Secondary Highway 235, Valley Center Road):* A proposed reconstruction project along Valley Center Road beginning at Reference Post 1.95, intersection of Valley Center Road and Loves Lane, and extending east to Reference Post 4.5. Summer of 2010 is the construction target date for this project.

- *Jct MT 85 – East (West Section) (Secondary Highway 235, Valley Center Road):* A proposed reconstruction project along Valley Center Road beginning at Reference Post 0.0, intersection of Valley Center Drive and Jackrabbit Lane, and extending east to the intersection of Valley Center Road and Loves Lane near Reference Post 1.95. This project is currently not fundable for construction.

- *Main & Jackrabbit Lane – Belgrade:* Intersection improvement project at the intersection of Secondary Highway 205 (Main Street) and Secondary Highway 291 (North Jackrabbit Lane). Project was completed in 2006.

- *Belgrade –North (Secondary Highway 290):* A Pavement Preservation project consisting of an asphalt overlay and chip seal beginning at Reference Post 2.88, Belgrade Urban Limits, and extending north to Reference Post 8.33. Project was completed in 2006.

- *Belgrade – South (Montana Highway 85):* A proposed widening and overlay project along Jackrabbit Lane beginning at Reference Post 3.0 , intersection of Hulbert Lane and Jackrabbit Lane, and extending north to the intersection of Frank Road and Jackrabbit Lane near Reference Post 6.1. This project is currently not fundable for construction.

- *Safety Improvements – West of Bozeman (Secondary Highway 205):* Addition of a turn lane and flashing beacon along Secondary 205 between Reference post 25.5 and Reference Post 25.9. Project was completed in 2005.

- *Safety Improvements – East of Manhattan (Secondary Highway 205):* A project proposed to improve roadway alignment along Secondary 205 between Reference Post 14.7 and Reference Post 15.5. Summer of 2012 is the construction target date for this project.

- *Four Corners – North (Montana Highway 85):* A proposed reconstruction project along Jackrabbit Lane beginning at Reference Post 0.0 , intersection of Huffine Lane and Jackrabbit Lane, and extending north to the intersection of Hulbert Lane and Jackrabbit Lane near Reference Post 3.0. This project is currently not fundable for construction.

- *JCT S-288 East (Secondary Highway 347, Amsterdam Road):* A Pavement Preservation project consisting of an asphalt overlay and chip seal beginning at Reference Post 0.0, Intersection of Church Hill Road and Amsterdam Road, and extending east to Reference Post 3.4. Project was completed in 2005.

- *2000-D2 Guardrail (Secondary Highway 347, Amsterdam Road):* A proposed safety improvement project to upgrade guardrail near the Gallatin River Bridge beginning near Reference Post 3.2 and ending near Reference post 4.1. Project was constructed in 2007.

- *U-603 Chip Seal (Broadway Street):* A Maintenance Pavement Preservation project consisting of a chip seal beginning at Reference Post 0.5, intersection of Broadway Street and Main, then extending North to the Belgrade Urban Limits approximately Reference Post 2.9. The project was completed in 2005.

- *Two Miles East of Belgrade (Secondary Highway 205):* A Maintenance Pavement Preservation project consisting of an asphalt overlay, and chip seal beginning at Reference Post 23.0, near the Middle Creek crossing, then extending east to the Junction with Secondary Highway 411 approximately Reference Post 26.9. The project was completed in 2003.

Each of the above projects has safety enhancement and improved operations as key objectives. Their implementation could have positive cumulative effects on safety, but it is unlikely that they would have cumulative environmental impacts because of their nature and distance from one another in space and time. Neither the Preferred Alternative nor other projects in the area are anticipated to contribute substantially to cumulative impacts.

While the Bozeman, Belgrade, and Greater Gallatin County areas have been experiencing rapid growth in recent years, and numerous private developments are currently planned or platted, none of the alternatives assessed would induce land use changes or promote unplanned growth. While it is not anticipated that any of the alternatives would induce growth by itself, one need only look at the development along Jackrabbit Lane since the existing interchange was completed, or along North 19th near Bozeman, to realize that interchanges can localize growth that would have happened anyway, but may have happened someplace else. In other words, it is reasonably foreseeable that there would be some increased development on Alaska Road, especially south of the interchange, if the interchange were to be built. It is not possible, however, to foresee exactly what the development would consist of or when it would happen, because such land use changes are influenced by many factors. See the list of those factors in the discussion on page on page 3-3, under Land Use. Besides those listed on page 3-3, other factors making it impossible to predict the how, when and where of growth include the current economic climate, the availability or non-availability of credit for business expansion, changes in customer preferences, and the cost of petroleum.

Under the Preferred Alternative, access to the Airport and private and commercial properties would continue to be provided, although potentially modified. Access changes are not expected to adversely impact existing or future businesses. Consultation with affected property owners would occur prior to completion of final design to minimize impacts to business operations.

Reconstruction and upgrade of the roadway and intersections in the project area will result in positive impacts of improved access for all area residents, businesses, truckers, tourist travelers, and service and emergency vehicles. These improvements would not be provided under the No-Build Alternative.

3.14 Permits and Regulatory Requirements

The proposed action would be in compliance with both the water quality provisions of 75-5-318 M.C.A. for Section 318 authorizations, and stream protection under Sections 87-5-501 through 509 M.C.A., inclusive. An on-site review of the Preferred Alternative area with representatives from MFWP and MDT will be scheduled if necessary. All comments, suggestions, and/or conditions resulting from review of existing data and/or on-site inspections would be documented, included in the project's files, and taken into account in the final design specifications.

The proposed action would require the following permits or authorizations under the Clean Water Act (33 U.S.C. 1251-1376, as amended):

- A Section 402/Montana Pollutant Discharge Elimination System (MPDES) authorization from the DEQ's Permitting & Compliance Division. The Build Alternatives would require new right-of-way and require an MPDES construction phase permit, which is issued in response to the 1987 re-authorization of the Clean Water Act. The Clean Water Act requires the U.S. Environmental Protection Agency to institute a National Pollutant Discharge Elimination System (NPDES) permitting program for storm drainage systems or to approve the state's programs. EPS approved Montana's program in 1987.

  Obtaining the MPDES permit requires development of a storm water pollution prevention plan that includes a temporary erosion and sediment control plan. The erosion and sediment control plan identifies BMP's as well as site-specific measures to minimize erosion and prevent eroded sediment from leaving the work zone.

All work would also be in accordance with the Water Quality Act of 1987 (P.L. 100-4), as amended.

4.0 LIST OF PREPARERS AND REVIEWERS

The responsibilities and qualifications of the reviewing agencies and the consultant team that prepared the I-90 East Belgrade Interchange Environmental Assessment are listed below:

Reviewer/Affiliation	Role	Education and Experience
Larry W. Watson Grants & Projects Administrator Gallatin County	Lead Agency	B. S. Psychology & Sociology – 30 years of public/private non-profit and local government administrative experience in the areas of grant writing, project planning and development, contract administration, and project management.
Lloyd H. Rue, P.E., P.T.O.E. EIS Reviewer FHWA	Lead Agency	B.S. Civil Engineering, M.S. Civil Engineering. 21 years experience in geometric design, traffic engineering, and safety.
Jeffrey A. Patten Operations Engineer FHWA	Lead Agency	B.S., Construction Management, 15 years experience in highway engineering, planning, environmental review, traffic analysis, and program/project management
Jeffrey M. Ebert, P.E. Butte District Administrator MDT	Lead Agency	B.S., Civil Engineering. Six years experience in construction project management and estimating. Seventeen years in highway planning, engineering, and program management.
Joe Olsen, P.E. Butte District Engineering Services Engineer MDT	Lead Agency	B.S. Geological Engineering. Over 20 years experience in highway planning, engineering & design; construction; and project & program management/development.
Gabe Priebe, P.E. Consultant Project Supervisor MDT	Lead Agency, Interagency Coordination	B.S., Civil Engineering, B.A. Mathematics. Seven years experience in construction, highway engineering, planning level safety analysis and project management.
Lynn Zanto Statewide & Urban Planning Manager MDT	Lead Agency, Planning	M.A., Transportation Policy, Operations, & Logistics, B.S., Business Administration with Financial Management emphasis. 15 years experience in transportation planning.
Tom Martin, P.E. Bureau Chief – Environmental Services MDT	Lead Agency	B.S., Civil Engineering. Over 14 years in transportation engineering, environmental review and program/project management.
Heidy Bruner, P.E. Engineering Section Supervisor Environmental Services MDT	Lead Agency, Environmental Compliance	B.S., Environmental Engineering. Approximately 10 years environmental engineering review, design and management.

Preparer/Affiliation	Role	Education and Experience
Darryl L. James, AICP Gallatin Public Affairs	Project Management, Environmental Compliance	M.P.A., with an Environmental Concentration; B.A., Public Affairs and Political Science. Senior consultant with over 18 years of professional experience. Expertise in transportation planning, NEPA analysis, and technical report writing.
Sarah Nicolai DOWL HKM	Document Preparation	B.A., Civil Engineering (ongoing). Over three years of legal and policy-related experience. Professional focus on planning and environmental documentation.
Tyler J. Schott Gallatin Public Affairs	Document Preparation	B.S., Civil Engineering (ongoing). One year of environmental analysis and documentation experience. Professional focus on transportation planning and environmental documentation.

Preparer/Affiliation	Role	Education and Experience
Phillip J. Forbes, P.E. Morrison-Maierle, Inc.	Conceptual Design	B.S., Civil Engineering. Senior Project Manager with 27 years of private and public sector experience in transportation, land development and municipal engineering.
Scott Bell, P.E. Morrison-Maierle, Inc.	Airport Liaison	B.S. & M.S., Civil Engineering. Over twenty years of experience with supervision and design for transportation projects for local private sector clients and governmental agencies.

5.0 DISTRIBUTION LIST

Federal Agencies

U.S. Department of the Interior
Fish & Wildlife Service
Montana Field Office, 100 N. Park, Suite #320
Helena, MT 59601
Attn: Mark Wilson, Field Supervisor

U.S. Department of the Interior
Fish & Wildlife Service
2900 4th Avenue North, Room 301
Billings, 59101-1266
Attn: Lou Hanebury, Biologist

Helena Airports District Office
Federal Aviation Administration
FAA Building, Suite 2
2725 Skyway Drive
Helena, MT 59601
Attn: Dave Stelling
John Styba

U.S. Environmental Protection Agency
Region VIII, Montana Office
Federal Building, 10 NW 15th Street, Suite 3200
Helena, MT 59626-0096
Attn: John F. Wardell, Director

U.S. Army Corps of Engineers
215 N.17th Street
Omaha, NE 68102-4978

State Agencies

Montana Department of Environmental Quality
1520 East 6th Avenue, P. O. Box 200901
Helena, MT 59620-0901
Attn: Judy Hanson, Administrator
Permitting & Compliance Division

Montana Department of Natural Resources & Conservation
1625 11th Avenue
P.O. Box 201601
Helena, MT 59104-0437
Attn: Mary Sexton, Director

Montana Environmental Quality Council
Office of the Director
Capitol Post Office
P. O. Box 215
Helena, MT 59620

Montana Governor's Office
Executive Office
Room 204, State Capitol
Helena, MT 59620-0801
Attn: Brian Schweitzer, Governor

Montana State Historic Preservation Office
1410 8th Avenue
P.O. Box 201202
Helena, MT 59620-1202
Attn: Stan Wilmott, Historian

Montana Fish, Wildlife & Parks
1420 East Sixth Avenue
P.O. Box 200701
Helena, MT 59620-0701
Attn: M. Jeff Hagener, Director
Glenn R. Phillips, Chief of Habitat and Protection Bureau Fisheries Division

Montana Transportation Commission
P.O. Box 201001
Helena, MT 59620-1001
Attn: Chair

Montana State Library
1515 East 6th Avenue, P.O. Box 201800
Helena, MT 59620-1800
Attn: Roberta Gebhardt
Collections Management Librarian

Local Agencies

Belgrade City Council
91 East Central
Belgrade, Montana 59714
Attn: John Youngberg

Belgrade Chamber of Commerce
10 East Main
Belgrade, MT 59714
Attn: Debra K. Youngberg, Executive Director

Belgrade Public Schools, District #44
P.O. Box 166
Belgrade, MT 59714
Attn: Herb Benz, Superintendent of Schools

Belgrade Community Library
106 North Broadway
Belgrade, MT 59714

Montana Rail Link Engineering Department
P.O. Box 16390
Missoula, MT 59808
Attn: Steve Werner

City of Bozeman
411 East Main
P.O. Box 1230
Bozeman, MT 59771-1230
Attn: Chris Kukulski, City Manager

Bozeman City Library
220 East Lamme
Bozeman, MT 59715

Belgrade Interchange Coordinating Committee
Bozeman, MT 59715
Attn: Pat Abelin, Chair

6.0 COMMENTS AND COORDINATION

6.1 Public Agencies

MDT contacted the following agencies and parties in preparing this EA.

Agencies with Jurisdiction and/or Permitting Authority

Advisory Council on Historic Preservation (ACHP, reviewed "Determinations of Effect")
Department of the Interior - U.S. Fish & Wildlife Service (USFWS)
Gallatin County (FEMA Floodplain Development Permit, Weed Control District)
Montana Department of Environmental Quality (DEQ, MPDES authorization)
State Historic Preservation Office (SHPO, reviewed/concurred with "Determination of Effect")
U.S. Environmental Protection Agency

Other Agencies, Groups, or Persons Contacted

Federal Aviation Administration
Gallatin County Commissioners
Gallatin County Planning Board
City of Belgrade
Montana Department of Natural Resources & Conservation (DNRC)
U.S. Department of Agriculture - Natural Resources Conservation Service (NRCS)
Montana Rail Link Engineering Department

6.2 Public Involvement

Public Meetings

A Public Scoping Meeting was held on Tuesday, November 15, 2005 from 7:00 to 9:00 pm at the Belgrade Middle School. The meeting was advertised in the Belgrade Daily News and the Bozeman Chronicle. The objective of the meeting was to discuss the purpose and need for the project and solicit public input to help identify any problem areas, individual concerns, and suggestions for improvement relating to the proposed interchange. Forty people attended the meeting.

A Public Information Meeting was held on Thursday, March 23, 2006 from 6:30 to 8:30 pm in the Belgrade City Chambers. The meeting was advertised in the Belgrade Daily News and the Bozeman Chronicle. The purpose of the meeting was to present possible interchange configurations and associated roadway improvements and to solicit public input about the project. Nearly 40 people attended this meeting.

Newsletters, Web Page, and Mailings

Two newsletters were prepared and made available at the Nov 2005 Public Scoping Meeting and the March 2006 Public Information Meeting. An additional newsletter was prepared in January 2006 and sent to the project mailing list. A fourth newsletter was prepared in August 2006 and

distributed in hard copy and electronic formats. All four newsletters were posted on the HKM website, which also included project descriptions and updates.

Interchange Coordinating Committee Meetings

Monthly meetings were held for this proposed project beginning in September 2005 and extending throughout the development of the EA. Attendees regularly included representatives from Gallatin County, the City of Belgrade, the Gallatin Airport Authority, MDT, FHWA, Belgrade Chamber of Commerce, and the consultant team.

No formal decisions were made during these meetings, but routinely consisted of discussions regarding project progress, general direction of the project, and future funding concerns.

Organizational Meetings

HKM Engineering staff attended and provided project information at the Belgrade Chamber of Commerce luncheon on March 23, 2006 upon their request.

Additional Public Involvement Events

A Public Hearing to obtain comments on this Environmental Assessment is scheduled to be held in Belgrade during the 45-day public review period. Notices have been published in the Belgrade News and Bozeman Daily Chronicle.

The Environmental Assessment has been made available on the MDT web page, at www.mdt.mt.gov/pubinvolve/eis_ea.shtml and hard copies can be viewed at the following locations during the public comment period:

Gallatin County
Commissioners Office
311 West Main Street, Room 306
Bozeman, MT 59715

MDT Headquarters
Environmental Services Bureau
2701 Prospect Avenue
Helena, MT 59620-1001

Belgrade City Hall
91 East Central
Belgrade, MT 59714

Belgrade Public Library
106 North Broadway
Belgrade, MT 59714

Gallatin Field
850 Gallatin Field Road
Belgrade, MT 59714

Bozeman Public Library
626 East Main Street
Bozeman, MT 59715

MDT – Bozeman Area Office
907 North Rouse Avenue
Bozeman, MT 59771-1110

APPENDICES

A. De Minimis Section 4(f) Evaluation

Section 4(f) was created when the U.S. Department of Transportation was formed in 1966. It was initially codified in the U.S. Code at 49 U.S.C. 1653(f) (or Section 4(f) of the USDOT Act of 1966). Later that year, 23 U.S.C. 138 was added. In 1983, Section 1653(f) was reworded and recodified at 49 U.S.C. 303. These two statutes have no real practical distinction and are still commonly referred to as "Section 4(f)."

Section 4(f) declares that "[i]t is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that "[t]he Secretary [of Transportation] shall not approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park area, refuge, or site) unless:

1) there is no prudent and feasible alternative to using that land; and

2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use."

Congress amended Section 4(f) in 2005 when it enacted the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6009 of SAFETEA-LU added a new subsection to Section 4(f), which authorizes FHWA to approve a project that results in a *de minimis* impact to a Section 4(f) resource without the evaluation of avoidance alternatives typically required in a Section 4(f) Evaluation. Section 6009 amended 23 U.S.C. 138 to state:

> The requirements of this section shall be considered to be satisfied and an alternatives analysis not required if the Secretary determines that a transportation program or project will have a *de minimis* impact on the historic site, parks, recreation areas, and wildlife or waterfowl refuges. In making any determination, the Secretary shall consider to be a part of the transportation program or project any avoidance, minimization, mitigation, or enhancement measures that are required to be implemented as a condition of approval of the transportation program or project. With respect to historic sties, the Secretary may make a finding of *de minimis* impact only if the Secretary has determined in accordance with the consultation process required under Section 106 of the National Historic Preservation Act that the transportation program or project will have no adverse effect on the historic site or there will be no historic properties affected by the transportation program or project; the finding has received written concurrence from the State Historic

Preservation Officer; and the finding was developed in consultation with the parties consulted under the Section 106 process.

A.1 Coordination

As discussed in the EA for this proposed project, two historic NRHP-eligible properties would be impacted by the Preferred Alternative. *As stated in the Guidance for Determining De Minimis Impacts to Section 4(f) Resources* (FHWA 2005), SHPO must concur in writing with the Section 106 "no adverse effect" determination and must be informed that FHWA intends to make a *de minimis* finding based on the Section 106 effect determination. Consulting parties under Section 106 must also be informed of the *de minimis* finding. MDT submitted a letter to coordinate with SHPO requesting a determination of effect on several properties in the Belgrade Interchange area. SHPO concurred with the "no adverse effect" determinations on each property listed in the corridor. FWHA subsequently made a *de minimis* finding with respect to the Spain-Ferris Fork Ditch and the Northern Pacific Railroad Main Line.

There would be no parks, recreation areas, or wildlife or waterfowl refuges that would be converted to a transportation use by the Preferred Alternative.

A.2 Proposed Action

The proposed action is a new Interstate 90 interchange on Alaska Road in Gallatin County. The work would include a new interchange providing access to I-90 on the eastern end of Belgrade, a new connection to MT 205 via a grade separated crossing of the BNSF rail line, and a new connection to Alaska Road on the south side of I-90. The purpose of the proposed project is to provide greater intermodal connectivity and improve regional mobility.

A.3 Section 4(f) Properties

There are two properties in the project area that are protect by Section 4(f) including a historic rail line and irrigation ditch. The table below identifies each property, their eligibility for protection, and the proposed impact on each resource.

Site Name:	Site Number:	SHPO Determination:
Northern Pacific RR Main Line	(24GA1096)	No Adverse Effect
Spain-Ferris Fork Ditch	(24GA0743)	No Effect

Impacts to the Northern Pacific Railroad Mainline and the Spain-Ferris Fork Ditch are illustrated below.

MDT has coordinated the proposed impacts to these historic properties with SHPO (see correspondence in Appendix B).

Proposed Impacts to Historic Properties by the I-90 East Belgrade Interchange project

Page Intentionally Left Blank

B. SHPO Coordination

RECEIVED
JUL 23 2008
ENVIRONMENTAL

2008070703

Montana Department of Transportation
2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

Jim Lynch, Director
Brian Schweitzer, Governor

CONCUR
MONTANA SHPO
DATE 21 Jul 08 SIGNED

• Josef
• MDT
• EAST Belgrade Interchange
EFFECT FINDING
BY: SHPO

July 2, 2008

Mark Baumler, Ph.D.
State Historic Preservation Office
1410 8th Avenue
P O Box 201202
Helena, MT 59620-1202

Subject: IM 90-6(111)298
East Belgrade Interchange
Control No. 5897

Enclosed is the Determination of Effect for the above project in Gallatin County. We have determined that the proposed interchange construction project would have **No Effect** to the Spain-Ferris Ditch (24GA743) and **No Adverse Effect** to the Northern Pacific Railway Main Line (24GA1096) for the reasons specified in the document. We request your concurrence.

If you have any questions, please contact me at 444-6258.

Jon Axline, Historian
Environmental Services

Enclosure

cc: Jeff Ebert, P.E., Butte District Administrator
Tim Conway, P.E., Consultant Design
Bonnie Steg, Resources Section

Environmental Services Bureau
Phone: (406) 444-7228
Fax: (406) 444-7245

An Equal Opportunity Employer

Engineering Division
TTY: (800) 335-7592
Web Page: www.mdt.mt.gov

DETERMINATION OF EFFECT

IM 90-6(111)298
East Belgrade Interchange
Control No. 5897

INTRODUCTION

The Montana Department of Transportation (MDT) intends to construct a new interchange on Interstate 90 about one mile east of Belgrade in Gallatin County, Montana. The new interchange would provide a more direct connection between the Interstate and the airport, Gallatin Field. Existing I-90 was constructed in 1966 and the MDT reconstructed the nearby Belgrade Interchange (#298) in 2000.

The preferred alternative for the proposed East Belgrade Interchange consists of a compressed diamond design with a 2,770-foot connector roadway to provide access to the airport to the north and to the frontage road paralleling I-90 on the south. The connector roadway would pass under a new Interstate overpass and also under the existing Burlington Northern-Santa Fe Railroad tracks (formerly the Northern Pacific Main Line). The connector would require the realignment of Alaska Road on the south to accommodate the new facility. The on/off ramps would be modified to minimize the footprint of the new facility and the amount of new Right-of-Way (R/W) needed. While the three intersections would be signal controlled under the preferred alternative, the MDT is studying the possibility of constructing roundabouts at the intersections to improve traffic flow. The proposed facility would be two-lanes with turn-bays at the on/off ramps. Approximately 64.2 acres would be required for this project, which provides for the future widening of the connector roadway to 4-lanes sometime in the future. There would be no change in existing alignment of Interstate 90 or Montana Secondary 205.

SIGNIFICANT CULTURAL RESOURCES

Two National Register of Historic Places-eligible sites are located within the Area of Potential Effect for this project: the Northern Pacific Railway Main Line (24GA1096) and the Spain-Ferris Ditch (24GA743).

Completed in 1883, the Northern Pacific Railway was the nation's second transcontinental railroad. Because of its continuing significance to the development of Montana, the Gallatin Valley, and the Bozeman-Belgrade area, the resource is eligible for the National Register under Criterion A.

Construction of the Spain-Ferris Ditch began in 1890 and continued until about 1905. The 10-mile ditch and its laterals significantly contributed to the agricultural development of the Gallatin Valley, making the site eligible for the National Register under Criterion A. The section of the ditch within the project area is currently infrequently used with the segment north of Interstate 90 to the Gallatin Field property enclosed in an underground pipe. The section of the ditch on the airport's property has been filled in and no longer functions for irrigation purposes.

PROJECT IMPACT

The segment of the Spain-Ferris Ditch (24GA743) within the APE of the project is a lateral and not the main channel. It has be channelized by Gallatin County to accommodate the alignment of Alaska Road sometime in the past. About 1,500± feet of the lateral would be enclosed in a pipe south of the Interchange to accommodate the eastbound on/off ramps and the new alignment of Alaska Road. About 200± feet of the lateral would be enclosed in a pipe north of I-90 to accommodate the west bound ramps. The remainder of the ditch would remain intact and there would be no impact to the main canal of the Spain-Ferris Ditch.

A grade separation structure would be constructed to carry the Northern Pacific Railway Main Line (24GA1096) over the connector road. The steel through-girder structure with spill through abutmensts would accommodate this double-tracked section of the railroad. The existing alignment of the railroad would be perpetuated. The railroad ballast and grade would be removed for a distance of 167-feet to accommodate the grade separation structure.

PROJECT EFFECT

There would be **No Effect** to the Spain-Ferris Ditch (24GA743) as a result of the proposed MDT project. Although 1,700± feet of the lateral would be enclosed in a pipe, it has already been significantly impacted by the construction of Interstate 90 in 1966 and by the county's construction of Alaska Road in the past. Indeed the lateral ditch is only infrequently used within the APE and the segment north of Secondary 205 on airport property has been filled in and is no longer used. The setting of the site has also been significantly changed by the Interstate and by the encroachment of residential subdivisions in the area within the last twenty years. Despite the changes to the lateral, the MDT intends to enclose it so it can still function as an irrigation ditch. The Spain-Ferris Ditch main canal is located to the east of this lateral and is situated outside the impact area of this project. None of the Criteria of Adverse Effect would apply to this lateral.

There would be **No Adverse Effect** to the Northern Pacific Railway Main Line (24GA1096). The proposed connector roadway would pass under the main line's tracks just north of the new interchange. The alignment of the railway would be perpetuated as would its historic/current function and there would be diminution in the service provided by the line as a result of the project. A 167-foot segment of the line, however, would be altered to accommodate the grade separation structure, so there would be an effect to resource, albeit a minor one.

US Department of Transportation
Federal Highway Administration

Montana Division

585 Shepard Way
Helena, MT 59601

July 29, 2008

Mark Baumler
State Historic Preservation Office
1410 8th Avenue
PO Box 201202
Helena, MT 59620-1202

In Reply Refer To:
HDA-MT 4F DE MINIMIS FINDING

Subject: ***De minimis Finding***
Project Name: East Belgrade Interchange
Project Number: IM 90-6(111)298
Control Number: 5897

Dear Mr. Baumler:

By way of this letter, the Federal Highway Administration (FHWA) is requesting written concurrence from the Montana State Historic Preservation Office (SHPO) that the determinations of effect as listed below are still applicable:
Northern Pacific Railroad Main Line 24GA1096 No Adverse Effect
Spain-Ferris Ditch 24GA743 No Effect

See attached previous concurrence and de minimis exhibits.

In addition to Section 106 of the National Historic Preservation Act (NHPA), FHWA must comply with the provisions of Section 4(f) of the 1966 Department of Transportation Act. Historically, Section 4(f) has required that prior to approval of any federally-funded highway project resulting in the "use" of listed or eligible historic properties under the NHPA; the FHWA must perform an avoidance analysis to determine whether there is a "feasible and prudent" alternative that would avoid the Section 4(f) resource.

In August of 2005, Section 138 of title 23, USC was amended under the Safe, Accountable, Flexible, and Efficient Transportation Act: A Legacy for Users (SAFETEA-LU). Section 6009 of SAFETEA-LU provided new legislative authority to address programs and projects with minor or "de minimis" impacts on a Section 4(f) resource.

More specifically, Section 6009(b) (2) of SAFETEA-LU states:

> (2) HISTORIC SITES.--With respect to historic sites, the Secretary may make a finding of *de minimis impact* only if--

AMERICAN ECONOMY

(A) the Secretary has determined, in accordance with the consultation process required under section 106 of the National Historic Preservation Act (16 U.S.C. 470f), that--

(i) the transportation program or project will have no adverse effect on the historic site; or

(ii) there will be no historic properties affected by the transportation program or project;

(B) the finding of the Secretary has received written concurrence from the applicable State historic preservation officer or tribal historic preservation officer (and from the Advisory Council on Historic Preservation if the Council is participating in the consultation process); and

(C) the finding of the Secretary has been developed in consultation with parties consulting as part of the process referred to in subparagraph (A).

This new provision of Section 4(f) is the basis of this letter, and of the FHWA's determination of *de minimis* impacts.

De Minimis Determination

The findings of "no effect and no adverse effect" reflect a conclusion that the uses identified in the attached exhibits will not "alter, directly or indirectly, any of the characteristics of [the] historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association."

If you concur in the "no effect and no adverse effect" determination, FHWA intends to make a finding that impacts to historic resources that would result from implementation of the subject project would be *de minimis* for purposes of Section 4(f), as recently amended by Congress.

Request for Concurrence

The FHWA requests the written concurrence of the Montana SHPO that the above-described finding of "no effect and no adverse effect" on historic resources from the subject project are still applicable. This written concurrence will be evidence that the concurrence and consultation requirements of Section 6009 of SAFETEA-LU, as they will be codified at 23 U.S.C. § 138(b)(2)(B) & (C), and 49 U.S.C. § 303 (d)(2)(B) and (C) are satisfied. Concurrence can be provided either by signing and dating this letter or by separate letter from the Montana SHPO to the Federal Highway Administration, 585 Shepard Way, Helena, MT 59601.

Sincerely,

Kevin L. McLaury, P.E.
Division Administrator

Attachments

cc: Jeff Patten, FHWA, Operations Engineer
Carl James, FHWA, Transportation Specialist

File: IM 90-6(111)298

CONCUR
MONTANA SHPO

DATE 11 Aug 08 SIGNED

C. Memorandum of Understanding

**MEMORANDUM OF UNDERSTANDING
BETWEEN GALLATIN COUNTY AND THE MONTANA DEPARTMENT OF TRANSPORTATION FOR THE PLANNING AND CONSTRUCTION OF
E BELGRADE INTERCHANGE-NORTH
IM-MT 90-6(112)299, UPN 5897001
SERVING THE GALLATIN FIELD AIRPORT**

This memorandum of understanding (MOU) by and between Gallatin County (County) and the Montana Department of Transportation (MDT) establishes the roles, responsibilities and commitments relative to the planning, sequencing, costs, administration, design, construction and maintenance responsibilities necessary for the planning and construction of a new Interstate 90 interchange and immediate connections north to the Frontage Road/MT 205 and south to Alaska Road ("Project", as fully defined on Attachment A) to be located in the vicinity of the Gallatin Field Airport:

WHEREAS, MDT is responsible for assuring that the planning, design, approvals and environmental clearances, construction and maintenance of state and federally-designated highway system facilities provide for the benefit of the traveling public in a safe and efficient manner in accordance with Title 23 United States Code (U. S. C.) and related federal regulation and guidance, and Title 60, Montana Code Annotated (MCA); and

WHEREAS, MDT is responsible for administering the Montana Transportation Commission's Policy Statement #13 on additional interchanges (Attachment B), which requires a finding that the economic development benefits which will result from the construction of this interchange warrants investing federal-aid highway funds and state resources for this Project; and

WHEREAS, The County agrees to be responsible for items identified in this MOU and, in accordance with Attachment B, agrees to "sponsor" this Project. Per this Transportation Commission policy, sponsorship by a local government is a prerequisite for a new interchange to be considered. The sponsor must be responsible for preparing feasibility and environmental studies, arranging the financial package for the Project, utility moves, and securing the right-of-way. MDT has assumed responsibility for preparing the design per Section V and Contract Award Administration per Section IX of this MOU; and

WHEREAS, the City, County and the Airport have committed through a July 2007 Interlocal Agreement to construct a new Eastside Bypass connection to Dry Creek Road, an extension of Northern Pacific Street, an extension of Frank Road, and improvements to Alaska Road from I-90 to Valley Center Drive that will further benefit the overall Belgrade area roadway network, but that are not essential for sufficient operation of the interstate; and

WHEREAS, the County has developed, through a qualified traffic engineer, an operational analysis in accordance with state and federal regulations (including

Attachment C - FHWA's Policy on Additional Interchanges to the Interstate System) relative to requesting new access onto the interstate that will be used in the County's preparation of the formal request for access;

WHEREAS, the County has obtained a consultant to perform the environmental review that has demonstrable experience in developing National Environmental Policy Act (NEPA) documents, has experience with socially sensitive issues, and has met with MDT's Environmental Unit and FHWA prior to initiating work to discuss state and federal expectations regarding the environmental process;

WHEREAS, it is mutually agreed upon that a cooperative delineation and identification of duties and responsibilities of the parties is essential to the overall development, construction, and long-term maintenance of this Project;

NOW THEREFORE, the parties set forth below the fundamental duties and responsibilities necessary to plan, construct, and maintain this proposed Project.

I. PLANNING (Compatibility With Planning Documents)

A. County:

1. Will be responsible for assuring that the proposed Project is compatible with the Bozeman/Belgrade urban areas' transportation plans and City and County land use plans.
2. Will provide MDT appropriate planning documents for review and approval to provide an analysis of the Project by MDT in accordance with Attachment B. These planning documents must specifically address issues/problems that will be solved or created for state and local government relative to the operational capacity of the existing and planned roadway networks, impacts on adjacent land use, environmental impacts on neighborhoods, analysis of land development potential relative to the proposed Project, the relationship of the Project to economic development initiatives and the relationship of the Project to other surface transportation modes such as transit and bike/pedestrian.

B. MDT:

1. Will provide traffic model information to the County for use in developing planning analyses.
2. Will provide technical support and approve submissions for adequacy and obtain FHWA approvals as necessary.
3. Will obtain Montana Transportation Commission approvals as necessary

II. ENVIRONMENTAL REVIEW

A. County:

1. Is responsible for the development of documents necessary for compliance with the NEPA, 23 CFR 771, FHWA Technical Advisory T6640.8A; Section

106 of the National Historic Preservation Act (NHPA); Section 4(f) of the US Department of Transportation (DOT) Act; the Montana Environmental Policy Act (MEPA), Title 75, chapter 1, parts 1 through 3, MCA; and all other applicable laws and regulations;

2. Will prepare all necessary permit applications in connection with the actions contemplated in this MOU and will submit all documents and analyses to MDT for advancement to the appropriate regulatory agencies for approvals. Section 106 of the National Historic Preservation Act of 1966 requires that the agency determine whether there are any National Register-listed or eligible properties that could be affected by the proposed Project. If Section 106 clearance is required, the County will provide the cultural resource report to MDT and MDT will obtain actual Section 106 clearance from the State Historic Preservation Office (SHPO).
3. The environmental analysis must:
   a. Address all social, economic, and environmental concerns (cultural, biological, historical, hazardous materials, environmental justice, etc.)
   b. Address the overall Project and the incremental phases of the overall Project.
   c. Include a hazardous waste audit on all anticipated right-of-way acquisitions.
4. Is solely responsible for any mitigations identified during the environmental review process and analysis including but not limited to any necessary clean-up of hazardous material problem sites revealed by the audit, and will identify all mitigations within a summary report.
5. Will hold MDT and FHWA harmless against any claim or requirement to mitigate actions taken by the County within the vicinity of the area to be served by the proposed Project.
6. Will be responsible for any environmental document reevaluation should that become necessary due to timing constraints under NEPA, and is responsible for developing an environmental document of acceptable quality and any necessary re-evaluations.

B. MDT:

1. Will cooperatively work with FHWA to obtain a determination of the necessary level of environmental documentation for compliance with NEPA/MEPA and other applicable federal and state laws.
2. Will review and provide guidance to the County in the development of environmental documents and permit applications and will submit all documents and analyses to the appropriate regulatory agency for approvals.
3. Will support and seek an approval from FHWA after the environmental document meets MDT standards.

C. All Parties:

1. Understand that the decisions made by MDT and FHWA pursuant hereto and the execution of this MOU does not constitute the irretrievable commitment of resources by MDT or the County until all necessary steps are taken with

regard to any particular decision to comply with NEPA/MEPA and other applicable state and federal laws.
2. Understand that FHWA approval for access constitutes a federal action, and as such, requires that NEPA procedures are completed in advance of this action.
3. Acknowledge that all phases of the overall Project are linked and must be analyzed comprehensively within the environmental review described within this section.

III. REQUEST FOR ACCESS

A. County:
1. Is responsible for the preparation of the document requesting Interstate access. This document must include all justifications, documentation, technical analysis, the information compiled in accordance with sections I and II of this MOU and all other information requested for evaluation by federal guidance and regulation and must be approved for sufficiency in meeting these requirements by MDT before submittal for federal approval.
2. Will address any deficiencies identified by FHWA within the submitted request for access.

B. MDT:
1. Once approved by MDT for sufficiency, will formally submit the request for access to FHWA for consideration.
2. Will provide the County cooperative assistance in addressing any deficiencies in the request identified by FHWA.
3. Will request the Transportation Commission's approval for the access point and Access Control Resolution once MDT has received and agrees there is sufficient documentation to justify the Project.

C. All Parties:
1. Acknowledge that new or additional access cannot be added onto Montana's Interstate System without prior approval of FHWA, in response to a formal request made by MDT.
2. Acknowledge that final approval of access cannot precede the completion of the NEPA process.
3. Acknowledge that FHWA and MDT may preview and provide conceptual comments on submittals for engineering and operational acceptability as part of the NEPA review process as provided for in Federal Register: February 11, 1998 (Volume 63, Number 28) pages 7045-7047.
4. Acknowledge that the NEPA review and comment is not approval of the access request.

IV. FUNDING

A. General:
1. The funding roles and responsibilities for the Project will be addressed in a supplemental agreement to be signed by all parties and considered in

conjunction with this MOU. During the project development phases, all parties will continue to refine the Project funding package, and acknowledge that all responsibilities described in this MOU are contingent on the development of a supplemental funding agreement acceptable to all parties.

2. Currently Identified Funding Sources: Subject to obligation limitations and indirect cost recovery rates, this Project is eligible for up to $8,000,000 of federal funds under SAFETEA-LU Section 1934 – Transportation Improvement project funds, plus local matching funds for development and construction of the Project, and $10,000,000 of federal funds under the Interstate Maintenance program, plus 8.76% state matching funds ($960,105), for construction of the Project. The lowest match rate allowed per 23 USC §120 will be applied to the SAFETEA-LU Section 1934 earmark.

3. §17-1-106, MCA, requires any state agency, including MDT, that receives non-general funds to identify and recover its indirect costs. These costs are in addition to direct project costs. MDT's indirect cost rate is determined annually as a percentage of the project's direct costs to cover the project's share of MDT's indirect costs as defined by OMB Circular A-87. MDT's current indirect cost rate is 14.06% for fiscal year 2009 (July 1, 2008 to June 30, 2009).

   For this Project, MDT billings will include a charge to the County for the indirect costs at the current fiscal year indirect cost rate, which amount will be applied toward the total project contribution of the County. [Note: If this Project extends across more than one fiscal year, more than one annual rate will be involved, as the rates may change during the life of the Project.]

4. A portion of the costs for Gallatin County's Environmental Assessment Contract is credited as local match for the Project. This amount is $268,533 based on costs incurred since federal approval of this matching source.

5. Project estimates will be updated at Project milestones as defined in Attachment D or as more refined estimates become available until Project closeout. All parties and their consultants will meet during the consultant contract scoping process and during each phase defined in Attachment D to exchange Project information, ensure Project is on track, and identify any outstanding issues. All parties must concur on the Project estimates before they can be used within this MOU as a basis for financial responsibility/participation in this Project.

B. County:

1. Will transfer non-federal matching funds to MDT for the SAFETEA-LU Section 1934 Transportation Improvement funds, associated indirect costs, and funding for other non-federal/non-state provided costs, within thirty (30) days of MDT billing. MDT will not submit programming requests to FHWA

for individual Project phases until the required local funds for the phase have been transferred to MDT.

2. Agrees to and acknowledges its responsibility for all costs associated with the Project set forth on Attachment A in excess of the $10,000,000 federal and $960,105 state match funds, and $8,000,000 SAFETEA-LU Section 1934 funds.
3. Is responsible for 100% of non-federal aid eligible costs.
    a. Will develop a comprehensive financial plan, for MDT review and approval, for the Project.

The financial plan must address sources of funds in the event of unanticipated cost overruns. This financial plan must be approved before MDT will request programming for the construction phase of the Project.

C. MDT:

1. Consistent with Transportation Commission approval, will allocate up to $10,000,000 in Interstate Maintenance funds for construction of this Project, with the funds becoming available no earlier than federal fiscal year 2008.
2. Will provide the non-federal match of up to $960,105 for the $10,000,000 Interstate Maintenance funds, no earlier than federal fiscal year 2008.
3. Will request Transportation Commission approval to provide state matching funds for any future federal funding secured for this Project
4. Will consider flexible match proposals from the County (i.e. public or private cash, materials, land, services, building or equipment) and determine eligibility for use as non-federal match for the "Project" based on the source and nature of the contribution, valuation and timing of the contribution, impact on MDT cash flow, and final approval by MDT and the FHWA Division Office (pursuant to 23 CFR 710 and 23 USC §323).
5. Will not hold the local parties responsible for repayment of federal-aid funds for preliminary engineering if the Project is not advanced to construction (pursuant to 23 USC §102c).

D. All Parties:

1. Agree and understand that the Project will not be programmed for the construction phase until a funding package for all improvements, including contingencies and overruns, is in place to MDT's satisfaction.
2. Agree and acknowledge that any expenditures of local, state, and federal funds occurring after June 30, 2007 will be subject to an indirect cost rate established annually by MDT and the FHWA through a federally approved indirect cost plan
3. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for User (SAFETEA-LU), Section 1934, Transportation Improvement Projects – Project Number 240; authorizes up to $8,000,000 for the "*East Belgrade Interchange and connecting roadways*". Actual funding available for expenditure under this section may be reduced due to obligation limitations imposed at the federal level. The terms of this MOU will apply to

the actual obligation amounts made available, which may be less than the full authorization amount.

V. PROJECT DESIGN PHASE

A. County:

1. Will submit, at no cost to MDT, any design material developed during the environmental review phase of this Project for MDT's use in developing final design and construction plans for the Project.
2. Will develop any preliminary design material needed during the environmental process according to standard practices found in MDT Design Project Development Guidelines and MDT Traffic Engineering Manual and in accordance with the recommended alternative as determined in the environmental documents described in the Environmental section of this MOU. These plans must be submitted to MDT in Microstation and Geopak format in accordance with MDT's project contract letting process.
3. Will provide non-federal match funds to MDT within thirty (30) days of billing, for SAFETEA-LU Section 1934 –Transportation Improvement funds used by MDT during the design development phase of this Project and associated indirect costs.

B. MDT:

1. Will develop construction design plans, in accordance with MDT design standards and the environmental process, for the Project using available SAFETEA-LU Section 1934 -Transportation Improvement project funds.
2. Will provide the County a design phase cost estimate including indirect costs to cover MDT administrative expenses and request for non-federal match funds for the SAFETEA-LU Section 1934 – Transportation Improvement Project funds prior to MDT initiating design phase activities.

VI. PROJECT CONSTRUCTION PHASE

A. County:

1. Acknowledges new interchanges must serve a transportation purpose and safely connect to appropriate components of the road and street network and agrees to submit a separate funding plan that will be included in a stand-alone funding agreement.
   a. This funding plan must demonstrate that all components of the Project will be completed and operational consistent with the recommendations of the environmental documents described in the Environmental section of this MOU.
   b. This funding plan must address right-of-way acquisition and utility relocations for the entire Project.
2. Acknowledges that FHWA construction phase approval is contingent on an acceptable and comprehensive funding plan for the completed Project.
3. Acknowledges that, according to federal regulations, if right-of-way is donated to a project, the value of the right-of-way can only be credited after

notification from MDT that FHWA authorization to proceed with right-of-way acquisition has been issued and is subject to the following provisions:

a. Any right of way acquired or donated for the Project must be procured in accordance with 49 CFR Part 24, Uniform Relocation Assistance and Real Property Acquisition Regulations for Federally Assisted Programs, and the guidelines and procedures contained in MDT's Right of Way Manual. Donated right-of-way for the Project can be used in lieu of non-federal match, but will be valued by the MDT as consistent with state and federal requirements.
b. If donated right-of-way becomes a part of the overall Project funding package, a separate agreement will cover transfer of ownership, quality of deed and valuation. Any issues will be resolved based on MDT requirements including that valuation, donation, and/or acquisition will precede construction advertisement of the Project.

4. Acknowledges that the value of quantifiable materials and other MDT and FHWA approved in-kind contributions can also be credited if all specifications are met and the transfer of ownership is accomplished after the Project is programmed. No other contributions or services will be credited.
5. Will prioritize Secondary 205 between Bozeman and Belgrade as its next Secondary Program priority (following current priority of Valley Center Road).
6. Has formally committed to implementing land-use decisions though the 2030 planning horizon consistent with the assumptions used in the travel demand modeling analysis of the interchange as part of the operational analysis (traffic impact study).

B. MDT:

1. Will contribute up to $10,000,000 of federal Interstate Maintenance funds plus 8.76% state matching funds ($960,105) to the construction phase of the proposed Project based on the Transportation Commission November 1, 2005 approval (Agenda Items #9 and #13), conditions outlined under "C. All Parties, Item 1" of this section below.

2. Will program any remaining SAFETEA-LU Section 1934 – Transportation Improvement project funds, after fully funding project development costs associated with this Project and receipt of local funds necessary to complete the funding package for construction and construction engineering, to the construction phase.

C. All Parties:

1. Agree and understand that MDT's funding contribution is contingent on the conditions described herein and therefore the Project will not be programmed for the construction phase until:
   a. a funding package for the Project, including contingencies and overruns, is in place to MDT's satisfaction and confirmed through a separate funding agreement as previously described in Section IV. Funding A. General 1; and

b. the County demonstrates prioritization of S-205 between Belgrade and Bozeman as the County's next Secondary program priority; and
c. the County and City of Belgrade formally commit to implementing land-use decisions through the 2030 planning horizon consistent with the operational analysis (traffic impact study) future land-use forecasts used in the travel demand modeling analysis of the interchange; and
d. all approvals, clearances and permits are obtained.

VII. RIGHT-OF-WAY ACQUISITION

A. County:

1. Is solely responsible to independently acquire all right-of-way needed for the Project. Any right of way acquired or donated for the Project must be procured in accordance with 49 CFR Part 24, Uniform Relocation Assistance and Real Property Acquisition Regulations for Federally Assisted Programs, and the guidelines and procedures contained in MDT's Right of Way Manual, and in accordance with the following:
   a. The County will acquire, in the name of MDT, a fee simple interest free of encumbrances for all right-of-way necessary for construction and operation of the Project and transfer to MDT all Project right of way, including the agreed-upon access control, before MDT will advertise bids for construction. This service will entail the actual definition of property to be acquired, development and submittal of right of way plans for MDT approval, preparation of legal descriptions, preparation of deeds and the actual appraisal for the right of way provided for each individual property owner.
   b. Access Control: Full access control will be enacted for a minimum of 300-feet from the north and south terminus of all Interchange Ramps. Access control will be conveyed to MDT by deed.
2. Formally notify MDT when ready to begin right-of-way acquisitions so MDT can request federal authorization to proceed.
3. Provide MDT certification that all right of way donated or purchased for this Project by the County or other participating parties was acquired in accordance with all applicable federal or state laws and regulations required for federally-funded projects, which may include the provisions of 49 CFR Part 24 (Uniform Relocation Assistance and Real Property Acquisitions Regulations For Federally Assisted Programs), that there was no relocation of individuals or businesses required, and that all structures within the new right of way have been demolished or removed. This certification is required prior to MDT's requesting Federal authorization of the construction phase.

B. MDT:

1. In the case of acquiring right-of-way for the Project, MDT will neither initiate nor participate in condemnation of any property interest or exercise of eminent domain.
2. On behalf of the County, will request federal authorization to proceed with right-of-way acquisitions upon formal notification from the County.

3. Is responsible for establishing the final determination and approval of appraised values for donated right of way.
4. Acknowledges that any right of way donated toward the Project will be considered as participation in the Project funding package, subject to limitations of federal/state match requirements, the right of way requirements of the Project, and subject to FHWA approval.

C. All Parties:

1. Valuation of County's right of way acquired for the Project will be determined by a qualified appraiser selected by County and approved by MDT.

VIII. UTILITIES

A. County:

1. Is solely responsible for all utility relocations and associated costs in accordance with state and federal requirements.
2. Will certify that all utility moves have been completed prior to MDT requesting federal authorization of the construction phase.

IX. CONTRACT AWARD ADMINISTRATION

A. County:

1. Will submit payment for its portion of Project cost based on the MDT engineer's estimate for the construction and construction engineering costs to MDT within thirty (30) days of billing. No funding for STP-Urban or Secondary projects will be forthcoming until payment is received from the County.
2. If the federal government requires a reimbursement or return of any federal funds because a project doesn't advance due to County's failure to make any scheduled payment, the County agrees that it will reimburse MDT for those federal funds within thirty (30) days of billing.
3. If at bid opening the County concurs in cost increases greater than 10% of MDT's estimate, the County will pay the increased costs within thirty (30) days of MDT's billing. If the County's share of the cost of the awarded project exceeds the amount paid by the County, the County may determine if other eligible federal funds are available and reach an agreement with MDT to allocate those funds to pay the excess. If other federal funds are not available, the County will pay the excess.

B. MDT:

1. Interchange: Once all approvals, clearances and permits are obtained by the County, MDT will provide a detailed breakdown of all estimated project costs and bill the County in advance for construction of the Project, including construction engineering costs, no more than sixty (60) days before bid opening.

2. Once a complete funding package is in place, will advertise, award and administer the construction contract for the Project in accordance with normal MDT procedures, including obtaining concurrence of award from FHWA.
3. Will not let the Project contract without the County's concurrence if the bid price exceeds the available funds or exceeds the engineer's estimate by more than 10%. If the County does not concur, the Project will not be awarded, since the County is also responsible for the cost increase. If the County does concur, the Project will be awarded and the County will be immediately billed for the amount exceeding the initial payment.
4. Will communicate with the County as stated below before approving change orders over $10,000 or for any amount that would negatively impact a designated County fund balance.
5. Once construction is approved, MDT will assist the County with any issues related to functional classification or systems designation of the new connector roadways north to the Frontage Road/MT 205 and south to Alaska Road according to established procedures and with the concurrence of the local government.

C. All Parties:

Understand that it is possible that the Project estimate may be exceeded once construction is begun, and any change orders, increases, or unforeseen expenses will be borne by the County. MDT will inform the County beforehand, and as early as possible, of anything that appears will result in a cost increase, and will discuss the need for any possible change order with the County. But it is agreed that the County does not have the ability to veto or delay, or refuse to pay for, any change orders deemed necessary by MDT

The County's portion of the cost of any change order will be billed as early as it can be readily determined, and will be due and payable by the County within thirty (30) days of the statement.

Within six (6) months after the project has been finally accepted with the final costs submitted, the MDT will submit a final statement to the County. The final statement will be in the form of an invoice and provide details of any expenses that may be identified as "miscellaneous", billing the County for cost overruns, or it will be a check, for overpayment by the County. The County will submit payment to the MDT within thirty (30) days of billing. If payment is not made within that thirty (30) day period, interest on the unpaid amount will accrue at the rate of 10% per year, and continue to accrue until paid in full. If the County is billed for additional funds, MDT will not participate in any future funding agreements with the County until full payment, including interest, is received from the County

Payments to this project will be coordinated through the MDT's Administration Division (to be directed to the MDT's Accounts Receivable Collections Technician and Accounting Systems Operations Supervisor).

Payments to this project will be provided to MDT staff in the form of a check to be deposited and credited to this Project.

X. MAINTENANCE

A. MDT:

1. Will be responsible for routine and long-term maintenance on the interchange, ramps and structure.
2. Will maintain connector roadways from the interchange north to the Frontage Road/MT 205 and from the interchange south to Alaska Road.

XI. OTHER

A. Governing Law: the laws of the State of Montana will govern this MOU. Venue for litigation will only be in Lewis and Clark County, State of Montana. In case of conflict between the obligation imposed by this MOU and Montana law, then Montana law will control.

B. Modification and Amendment: This MOU may be modified or amended, in writing, by the mutual consent of the parties involved up to and until award of the contracts for the Project. Such changes may develop from engineering analysis, public input of federal statutory/regulatory changes. MDT funding commitments cannot be changed without Transportation Commission approval.

C. Complimentary Agreements: The parties of this MOU may enter into separate agreements during the development of the Project. Any such agreements will not supercede this MOU.

D. Termination: Both the MDT and the County agree to move in an efficient and expeditious manner toward development of the proposed Project. Either party may terminate this MOU, and all obligations hereunder, with 30-day notice in writing to the other party of the intention to do so. This MOU may not be terminated once a contract or contracts have been awarded for construction of the Project.

E. Liability:

The County will defend, indemnify and hold harmless the State of Montana, including MDT, from any claims, losses, defense costs, attorney's fees, and judgments arising from or resulting from the County's, and the County's consultants', contractors', and subcontractors', negligence, errors or omissions in performing any duty or responsibility arising from this MOU.

The State of Montana, including MDT, will defend, indemnify and hold harmless the County from any claims, losses, defense costs, attorney's fees, and judgments arising from or resulting from MDT's, and MDT's

consultants', contractors', and subcontractors', negligence, errors or omissions in performing any duty or responsibility arising from this MOU.

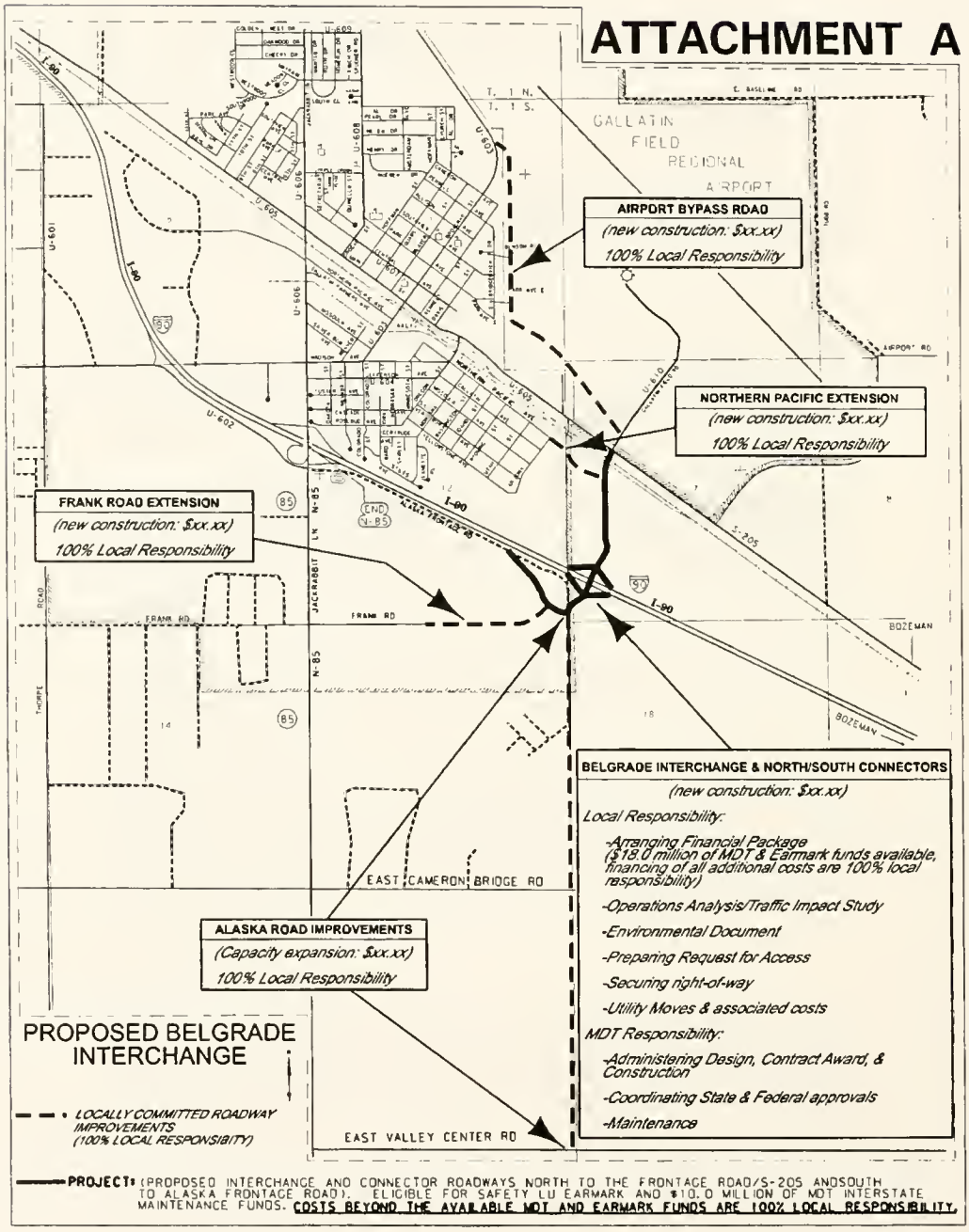
GALLATIN COUNTY

By: _____
Gallatin County Board of Commissioners

MONTANA DEPARTMENT OF TRANSPORTATION

By: _____ Date: 6/19/2008
Montana Department of Transportation

_____ _____
Approved for Legal Content Approved for Civil Rights Content


ATTACHMENT A
GALLATIN FIELD REGIONAL AIRPORT
AIRPORT BYPASS ROAD
(new construction: $xx.xx)
100% Local Responsibility
NORTHERN PACIFIC EXTENSION
(new construction: $xx.xx)
100% Local Responsibility
FRANK ROAD EXTENSION
(new construction: $xx.xx)
100% Local Responsibility
BELGRADE INTERCHANGE & NORTH/SOUTH CONNECTORS
(new construction: $xx.xx)
Local Responsibility:
-Arranging Financial Package ($18.0 million of MDT & Earmark funds available, financing of all additional costs are 100% local responsibility)
-Operations Analysis/Traffic Impact Study
-Environmental Document
-Preparing Request for Access
-Securing right-of-way
-Utility Moves & associated costs
MDT Responsibility:
-Administering Design, Contract Award, & Construction
-Coordinating State & Federal approvals
-Maintenance
ALASKA ROAD IMPROVEMENTS
(Capacity expansion: $xx.xx)
100% Local Responsibility
PROPOSED BELGRADE INTERCHANGE
LOCALLY COMMITTED ROADWAY IMPROVEMENTS (100% LOCAL RESPONSIBILITY)
PROJECT: (PROPOSED INTERCHANGE AND CONNECTOR ROADWAYS NORTH TO THE FRONTAGE ROAD/S-205 AND SOUTH TO ALASKA FRONTAGE ROAD). ELIGIBLE FOR SAFETY LU EARMARK AND $10.0 MILLION OF MDT INTERSTATE MAINTENANCE FUNDS. COSTS BEYOND THE AVAILABLE MDT AND EARMARK FUNDS ARE 100% LOCAL RESPONSIBILITY.
I-90
FRANK RD
EAST CAMERON BRIDGE RD
EAST VALLEY CENTER RD
BOZEMAN
JACKRABBIT LN
N-85
S-205
U-601
U-602
U-606
U-608
U-609
T. 1 N.
T. 1 S.

ATTACHMENT B

TRANSPORTATION COMMISSION POLICY STATEMENT #13 - ADDITIONAL INTERCHANGES

****
***

MONTANA TRANSPORTATION COMMISSION
POLICY STATEMENT

Adopted by the Montana Transportation Commission
during regular session in June, 1992, Updated February, 1992, Updated November 22, 2002
Updated July 17, 2003
Policy Number 13

****
***

Background

Montana's Interstate was well planned and access that was provided to it at the time of original construction was appropriate for the needs and land use that then existed.

However, over the years the land use and needs did change in some areas, so on June 28, 1984 the Montana Highway Commission adopted a policy which set forth the criteria upon which additional interchanges could be financed with I-4R (Interstate resurfacing, restoration, rehabilitation, and reconstruction) funds.

Based on that policy, the following interchanges were considered:

South Billings Blvd. At Billings (constructed)
I-315 at Great Falls (constructed)
North 19th at Bozeman (constructed)
Forestvale Road at Helena (alternatives under review as part of I-15 EIS)
Shiloh Road at Billings (constructed)
Airport at Missoula (constructed)

Any of these interchange concepts still not constructed will continue based on the June 28, 1984 policy.

Discussion

Times are still changing and the highway funding picture for interchanges is tighter. The Intermodal Surface Transportation Efficiency Act of 1991 declared the Interstate completed and eliminated any further Interstate construction funds for new interchanges. In 1998 Transportation Equity Act still allows additional interchanges to be added to the interstate. However, if federal aid transportation funds are to be used to construct interchanges, they must be either IM (Interstate Maintenance) NHS (National Highway System) or STP (Surface Transportation Program) funds. Additional interchanges must therefore compete with other badly needed improvement projects on Montana's arterial and major collector systems. Other categories of funds, such as bridge, may also be eligible depending on the cost benefit of the investment.

The following policy will therefore guide the state's investment in new interchanges.

Policy
It is the policy of the Montana Transportation Commission that additional interchanges on Montana's Interstate be considered for addition on the following basis.

To be considered, an interchange proposed by an entity other than the MDT must:

Be physically feasible. It must meet applicable engineering and traffic standards and not be unreasonably expensive.

Be compatible with local planning. It must be compatible with the local transportation improvement program and long-range transportation and land use plans as applicable.

Have a sponsor willing to carry the financial and administrative burden. That sponsor must be a city or county government and would have to carry the ball as far as preparing feasibility and environmental studies, arranging the financing package, preparing the design, securing the right-of-way, and securing the access through the MDT and FHWA reviews and approvals.

And

Have a funding plan compatible with the interchange's intended use. For example, at one extreme, an Interchange proposed to serve and enhance a private development would be financed entirely with private funds. At the other end of the spectrum would be a facility without such private benefit that might be funded from a variety of public sources. Between those extremes could be many different situations and funding plans. For example, an interchange that derives 50% of its benefits from increasing land values in the immediate area, 20% from benefits to through traffic and the other 30% from benefits to local traffic, should have a funding package that would consist of 20% IM or NHS money, 30% STP or city funds, and 50% from a local SID assessing property in the area being benefited.

The Montana Department of Transportation and Montana Transportation Commission sets funding priorities unless:

1) There is a positive showing that all needs on the existing NHS and STP program are being met, or

2) There is a positive showing that the economic development benefits which will result from construction of a new interchange outweigh the necessity to meet existing needs in No. 1 above.

Note: For purposes of this section "economic development" means the creation of new manufacturing or other non-retail jobs.

If additional interchanges meet the above criteria, the Montana Department of Transportation and the Montana Transportation Commission will consider the following factors in their further analysis of the proposals:

1. Traffic use (both present and future)
2. Cost (P.E., R/W, Construction, and Maintenance)
3. Local and/or private funding support
4. Problems solved for the Department of Transportation (operational, capacity, etc.)
5. Problems created for the Department of Transportation (operational, capacity, etc.)
6. Problems solved for local governments (operational, capacity, etc.)
7. Problems created for local governments (land use, zoning, maintenance, etc.)
8. Social, economic, and environmental impacts
9. Benefit – cost analysis
10. Economic development

Additional interchanges must stand on their own merits and compete with other types of projects for inclusion in the program.

If the MDT identifies the need for an additional interchange, this project will compete with other system needs for funding.

_____
Chair, Montana Transportation Commission

ATTACHMENT C

ADDITIONAL INTERCHANGES TO THE INTERSTATE SYSTEM

[Federal Register: February 11, 1998 (Volume 63, Number 28)]

[Notices]

[Page 7045-7047]

From the Federal Register Online via GPO Access

[DOCID fr11fe98-120]

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Additional Interchanges to the Interstate System

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of policy statement.

SUMMARY: This document issues a revision of the FHWA policy statement regarding requests for added access to the existing Interstate system. The policy includes guidance for the justification and documentation needed for requests to add access (interchanges and ramps) to the existing Interstate System. The policy statement was originally issued in the Federal Register on October 22, 1990 (55 FR 42670).

DATES: The effective date of this policy is February 11, 1998.

FOR FURTHER INFORMATION CONTACT: Mr. Seppo I. Sillan, Federal-Aid and Design Division, Office of Engineering, (202) 366-0312, or Mr. Wilbert Baccus, Office of Chief Counsel, (202) 366-0780, Federal Highway Administration, 400 Seventh Street SW., Washington DC 20590. Office hours are from 7:45 a.m. to 4:15 p.m., e.t., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Background

Section 111 of title 23, U.S.C., provides that all agreements between the Secretary and the State highway department for the construction of projects on the Interstate System shall contain a clause providing that the State will not add any points of access to, or exit from, the project in addition to those approved by the Secretary in the plans for such project, without the prior approval of the Secretary. The Secretary has delegated the authority to administer 23 U.S.C. 111 to the Federal Highway Administrator pursuant to 49 CFR 1.48(b)(10). A formal policy statement including guidance for justifying and documenting the need for additional access to the existing sections of the Interstate System was published in the Federal Register on October 22, 1990 (55 FR 42670).

The FHWA has adopted the AASHTO publication "A Policy on Design Standards--Interstate System" as its standard for projects on the Interstate System. This publication provides that access to the Interstate System shall be fully controlled by constructing grade separations at selected public crossroads and all railroad crossings. Where interchanges with selected public crossroads are constructed, access control must extend the full length of ramps and terminals on the crossroad.

Summary of Changes

The changes in the policy statement are being made to reflect the planning requirements of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA, Pub. L. 102-240) as implemented in 23 CFR part 450, to clarify coordination between the access request and environmental processes, and to update language at various locations. The following specific revisions are made to the existing policy statement:

1. An additional sentence is added to item 5 under "Policy" that ensures requests for new or revised access are consistent with 23 CFR part 450 and 40 CFR parts 51 and 93.
2. Text in item 5 pertaining to future interchange additions has been moved to item 6 because it covers a different subject.
3. Item 6 is redesignated as item 7.
4. A new item 8 is added so that those reviewing the access request have the information necessary to process the request.
5. The fifth paragraph under "Application" is revised to clarify coordination with the environmental process.

The revised policy statement also includes various editorial changes to enhance clarity and readability. The revised policy statement is as follows:

Policy

It is in the national interest to maintain the Interstate System to provide the highest level of service in terms of safety and mobility. Adequate control of access is critical to providing such service. Therefore, new or revised access points to the existing Interstate System should meet the following requirements:

1. The existing interchanges and/or local roads and streets in the corridor can neither provide the necessary access nor be improved to satisfactorily accommodate the design-year traffic demands while at the same time providing the access intended by the proposal.
2. All reasonable alternatives for design options, location and transportation system management type improvements (such as ramp metering, mass transit, and HOV facilities) have been assessed and provided for if currently justified, or provisions are included for accommodating such facilities if a future need is identified.
3. The proposed access point does not have a significant adverse impact on the safety and operation of the Interstate facility based on an analysis of current and future traffic. The operational analysis for existing conditions shall, particularly in urbanized areas, include an analysis of sections of Interstate to and including at least the first adjacent existing or proposed interchange on either side. Crossroads and other roads and streets shall be included in the analysis to the extent necessary to assure their ability to collect and distribute traffic to and from the interchange with new or revised access points.
4. The proposed access connects to a public road only and will provide for all traffic movements. Less than "full interchanges" for special purpose access for transit vehicles, for HOV's, or into park and ride lots may be considered on a case-by-case basis. The proposed access will be designed to meet or exceed current standards for Federal-aid projects on the Interstate System.
5. The proposal considers and is consistent with local and regional land use and transportation plans. Prior to final approval, all requests for new or revised access must be consistent with the metropolitan and/or statewide transportation plan, as appropriate, the applicable provisions of 23 CFR part 450 and the transportation conformity requirements of 40 CFR parts 51 and 93.
6. In areas where the potential exists for future multiple interchange additions, all requests for new or revised access are supported by a comprehensive Interstate network study with recommendations that address all proposed and desired access within the context of a long-term plan.
7. The request for a new or revised access generated by new or expanded development demonstrates appropriate coordination between the development and related or otherwise required transportation system improvements.
8. The request for new or revised access contains information relative to the planning requirements and the status of the environmental processing of the proposal.

Application

This policy is applicable to new or revised access points to existing Interstate facilities regardless of the funding of the original construction or regardless of the funding for the new access points. This includes routes incorporated into the Interstate System under the provisions of 23 U.S.C. 139(a) or other legislation.

Routes approved as a future part of the Interstate system under 23 U.S.C. 139(b) represent a special case because they are not yet a part of the Interstate system and the policy contained herein does not apply. However, since the intention to add the route to the Interstate system has been formalized by agreement, any proposed access points, regardless of funding, must be coordinated with the FHWA Division Office. This policy is not applicable to toll roads incorporated into the Interstate System, except for segments where Federal funds have been expended, or where the toll road section has been added to the Interstate System under the provisions of 23 U.S.C. 139(a).

For the purpose of applying this policy, each entrance or exit point, including "locked gate" access, to the mainline is considered to be an access point. For example, a diamond interchange configuration has four access points.

Generally, revised access is considered to be a change in the interchange configuration even though the number of actual points of access may not change. For example, replacing one of the direct ramps of a diamond interchange with a loop, or changing a cloverleaf interchange into a fully directional interchange would be considered revised access for the purpose of applying this policy.

All requests for new or revised access points on completed Interstate highways must be closely coordinated with the planning and environmental processes. The FHWA approval constitutes a Federal action, and as such, requires that the National Environmental Policy Act (NEPA) procedures are followed. The NEPA procedures will be accomplished as part of the normal project development process and as a condition of the access approval. This means the final approval of access cannot precede the completion of the NEPA process. To offer maximum flexibility, however, any proposed access points can be submitted in accordance with the delegation of authority for a determination of engineering and operational acceptability prior to completion of the NEPA process. In this manner, the State highway agency can determine if a proposal is acceptable for inclusion as an alternative in the environmental process. This policy in no way alters the current NEPA implementing procedures as contained in 23 CFR part 771.

Although the justification and documentation procedures described in this policy can be applied to access requests for non-Interstate freeways or other access controlled highways, they are not required. However, applicable Federal rules and regulations, including NEPA procedures, must be followed.

Implementation

The FHWA Division Office will ensure that all requests for new or revised access submitted by the State highway agency for FHWA consideration contain sufficient information to allow the FHWA to independently evaluate the request and ensure that all pertinent factors and alternatives have been appropriately considered. The extent and format of the required justification and documentation should be developed jointly by the State highway agency and the FHWA to accommodate the operations of both agencies, and should also be consistent with the complexity and expected impact of the proposals. For example, information in support of isolated rural interchanges may not need to be as extensive as for a complex or potentially controversial interchange in an urban area. No specific documentation format or content is prescribed by this policy.

Policy Statement Impact

The policy statement, first published in the Federal Register on October 22, 1990 (55 FR 42670), describes the justification and documentation needed for requests to add or revise access to the existing Interstate System. The revisions made by this publication of the policy statement reflect the planning requirements of the ISTEA as implemented in 23 CFR part 450, clarify coordination between the access request and environmental processes, and update language at various locations. The States will have to take these factors into consideration when making future requests for new or revised access points, but the overall effort necessary for developing the request will not be significantly increased.

Authority: 23 U.S.C. 315; 49 CFR 1.48.

Issued: February 4, 1998.

Kenneth R. Wykle,

Administrator, Federal Highway Administration.

[FR Doc. 98-3460 Filed 2-10-98; 8:45 am]

BILLING CODE 4910-22-P

ATTACHMENT D

PROJECT MILESTONES PRIOR TO CONSTRUCTION

Introduction:
The following narrative is a general summary of the MDT Consultant Design process. An official, more detailed version, of this process is contained in MDT's Consultant Design Activity Descriptions and The MDT Consultant Design Flowchart (the flowchart). The most current versions of these documents are available upon request from MDT or online at the MDT website: http://www.mdt.mt.gov/

1. Survey Phase:
A. Alignment and Grade Review (AGR): This is a meeting with all appropriate engineering disciplines to establish the project's horizontal alignment and vertical alignment (grade). Comments on the road plans, cross sections, and the project estimate are discussed during the office portion of the meeting. After the office plan review, the design team goes out to the project site to review the plans and compare them with the physical features on the ground. The AGR meeting is summarized in an AGR report which gives a detailed description of project design features and decisions that were made at the AGR meeting. The report is distributed throughout MDT and FHWA for review and comment.

Engineering activities leading up to this meeting include preliminary hydraulics report, preliminary geotech and materials report, preliminary bridge layout, preliminary traffic plans, alignment and grade traffic plans, preliminary survey, cadastral survey, preliminary roadway design, roadway alignment plan, preliminary right-of-way.

Environmental Activities leading up to this meeting include cultural resource report, traffic noise report, air quality assessment, Haz Mat/ISA, Biological Resources Report.

B. Environmental Assessment (EA): This project involves preparation of an EA. For an EA to be approved, there are a number of steps necessary. First, the preliminary EA needs to address initial internal (MDT, FHWA, local agency) comments. Upon reviewing and incorporating internal comments the EA is signed by MDT and FHWA. The EA then goes out for public review during which formal public meeting is held. After public review, public comments are compiled and addressed in a draft decision document. If FHWA approves the document and issues a Finding of No Significant Impact (FONSI) this marks the completion EA process. If a FONSI is not issued, an Environmental Impact Statement (EIS) may be required.

C. Scope of Work: The scope of work combines the results of the Alignment and Grade Report with any developments that come out of the E-doc. The Report identifies the project's preliminary estimated construction cost, outlines all major project design features and sets the anticipated design scope of the project. The E-doc must be approved before the Scope of Work Report can be finalized.

As soon as the Scope of Work Report is finalized, the project moves from the Survey Phase to the design phase.

2. Design Phase:
A. Plan-in-Hand (PIH): The PIH review meeting is the major milestone in the Design Phase. The PIH meeting is similar in format to the Alignment and Grade Meeting described above, but at

this stage the plans and estimate are much further refined. Quantities and Summary Frames are reviewed along with a detailed cost estimate, preliminary right-of-way plans and special provisions. Like the AGR, the PIH review consists of an office review and a field review.

The design activities that lead up to the PIH include the Final Hydraulics Report, Geotech and Materials, Road Plans, Preliminary Right-of-Way plans, Traffic Plans and Preliminary Structure Plans. During this time exceptions to the standard design criteria are identified and a formal design exception request is prepared, if applicable.

After the PIH meeting, the consultant produces the Plan-In-Hand Report. MDT's approval of this report marks the end of the Design Phase.

3. **Right-of-Way (R/W) Phase:**

A. R/W Authorization: Following PIH and review of the preliminary R/W Plans, the consultant incorporates comments and provides R/W plans for MDT to review. After the consultant addresses the R/W plans to MDT's satisfaction, Right-of-Way is "authorized." After right-of-way is authorized, the right-of-way appraisal and negotiation process can start. Note: Per the MOU, The county is soley responsible to independently acquire all right-of-way for the project. Because MDT typically acquires right-of-way, the East Belgrade Interchange project flow may somewhat deviate from what is shown on the flowchart, however MDT will still be involved in the appraisal process and R/W authorization. It is expected that the order of R/W activities will remain similar to that shown on the flowchart.

B. Final Plan Review: Following PIH, the consultant will incorporate all comments received and produce Final Design Plans. These plans are reviewed at the Final Plan Review meeting which is typically an office meeting in which the entire plan package is thoroughly reviewed in preparation for transmitting the plans to Contract Plans. After the Final Plan Review, a Final Plan Review Report, including an updated cost estimate is produced and distributed for review and comment.

C. Transmit to Contract Plans: The consultant submits the final construction plans after incorporating all changes resulting from the Final Plan Review and Final Structures Review. The plans then go to the Contract Plans Bureau and undergo a quality review process that typically requires additional minor changes prior to the project being let for construction.

ATTACHMENT E

NON-DISCRIMINATION NOTICE

During the performance of this Agreement, Gallatin County (hereafter in this Section "the Party"), for itself, its assignees and successors in interest, agrees as follows:

A) COMPLIANCE WITH TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 FOR FEDERAL-AID CONTRACTS

(1) Compliance with Regulations: The Party shall comply with all Regulations relative to nondiscrimination in Federally-assisted programs of the Department of Transportation, 49 Code of Federal Regulations (CFR), Part 21, as they may be amended (hereafter referred to as the Regulations), which are incorporated by reference and made a part of this Agreement, even if only state funding is here involved.

(2) Nondiscrimination: The Party, with regard to the work performed by it during the Agreement, shall not discriminate on the grounds of sex, race, color, or national origin in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Party shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR Sec. 21.5.

(3) Solicitations for Subcontracts, Including Procurement of Materials and Equipment: In all solicitations, whether by competitive bidding or negotiation by the Party for work to be performed under a subcontract, including procurement of materials or leases of equipment, any potential subcontractor or supplier shall be notified by the Party of the Party's obligations under this Agreement and the Regulations relative to nondiscrimination.

(4) Information and Reports: The Party will provide all reports and information required by the Regulations, or directives issued pursuant thereto, and permit access to its books, records, accounts, other sources of information and its facilities as may be determined by State or the Federal Highway Administration (FHWA) to be pertinent to ascertain compliance with Regulations or directives. Where any information required of the Party is in the exclusive possession of another who fails or refuses to furnish this information, the Party shall so certify to the Department or the FHWA as requested, setting forth what efforts it has made to obtain the information.

(5) Sanctions for Noncompliance: In the event of the Party's noncompliance with the nondiscrimination provisions of this Agreement, State may impose sanctions as it or the FHWA determines appropriate, including, but not limited to,

(a) Withholding payments to the Party under the Agreement until the Party complies, and/or

(b) Cancellation, termination or suspension of the Agreement, in whole or in part.

(6) Incorporation of Provisions: The Party will include the provisions of paragraphs (1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The Party will take such action with respect to any subcontract or procurement as the State or the FHWA may direct to enforce such provisions including sanctions for noncompliance: Provided, however, that in the event the Party is sued or is threatened with litigation by a subcontractor or supplier as a result of such direction, the Party may request the State to enter into the litigation to protect the interests of the State, and, in addition, the Party or the State may request the United States to enter into such litigation to protect the interests of the United States.

B) COMPLIANCE WITH THE MONTANA GOVERNMENTAL CODE OF FAIR PRACTICES, SEC. 49-3-207, MCA

In accordance with Section 49-3-207, MCA, the Party agrees that for this Agreement all hiring will be made on the basis of merit and qualifications and that there will be no discrimination on the basis of race, color, religion, creed, political ideas, sex, age, marital status, physical or mental disability, or national origin by the persons performing the Agreement.

C) COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT (ADA)

(1) The Party will comply with all regulations relative to implementation of the AMERICANS WITH DISABILITIES ACT.

(2) The Party will incorporate or communicate the intent of the following statement in all publications, announcements, video recordings, course offerings or other program outputs: **"The Party will provide reasonable accommodations for any known disability that may interfere with a person in participating in any service, program or activity offered by the Party. In the case of documents, recordings or verbal presentations, alternative accessible formats will be provided. For further information call the Party."**

(3) All video recordings produced and created under contract and/or agreement will be closed-captioned.

D) COMPLIANCE WITH PARTICIPATION BY DISADVANTAGED BUSINESS ENTERPRISES IN DEPARTMENT OF TRANSPORTATION FINANCIAL ASSISTANCE PROGRAMS, 49 CFR PART 26

Each Agreement the Department signs with a Party (and each subcontract the prime contractor signs with a subcontractor) must include the following assurance:

The Party, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Party shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the Party to carry out these requirements is a material breach of this contract, which may

result in the termination of this contract or such other remedy as the recipient deems appropriate.

Page Intentionally Left Blank

I-90 East Belgrade Interchange

Environmental Assessment

The Montana Department of Transportation attempts to provide accommodations for any known disability that may interfere with a person participating in any service, program or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information call (406) 444-7228 or TTY (800) 335-7592.

This document may be obtained electronically from the Montana Department of Transportation website at:
www.mdt.mt.gov/pubinvolve/eis_ea.shtml

Montana Department of Transportation

serving you with pride

U.S. Department of Transportation
Federal Highway Administration